

No. 641,025.

Patented Jan. 9, 1900.

A. LEECH & G. J. COUCHOIS.
SELF PLAYING WHISTLE.

(Application filed Jan. 28, 1899.)

(No Model.)

Fig. 1.

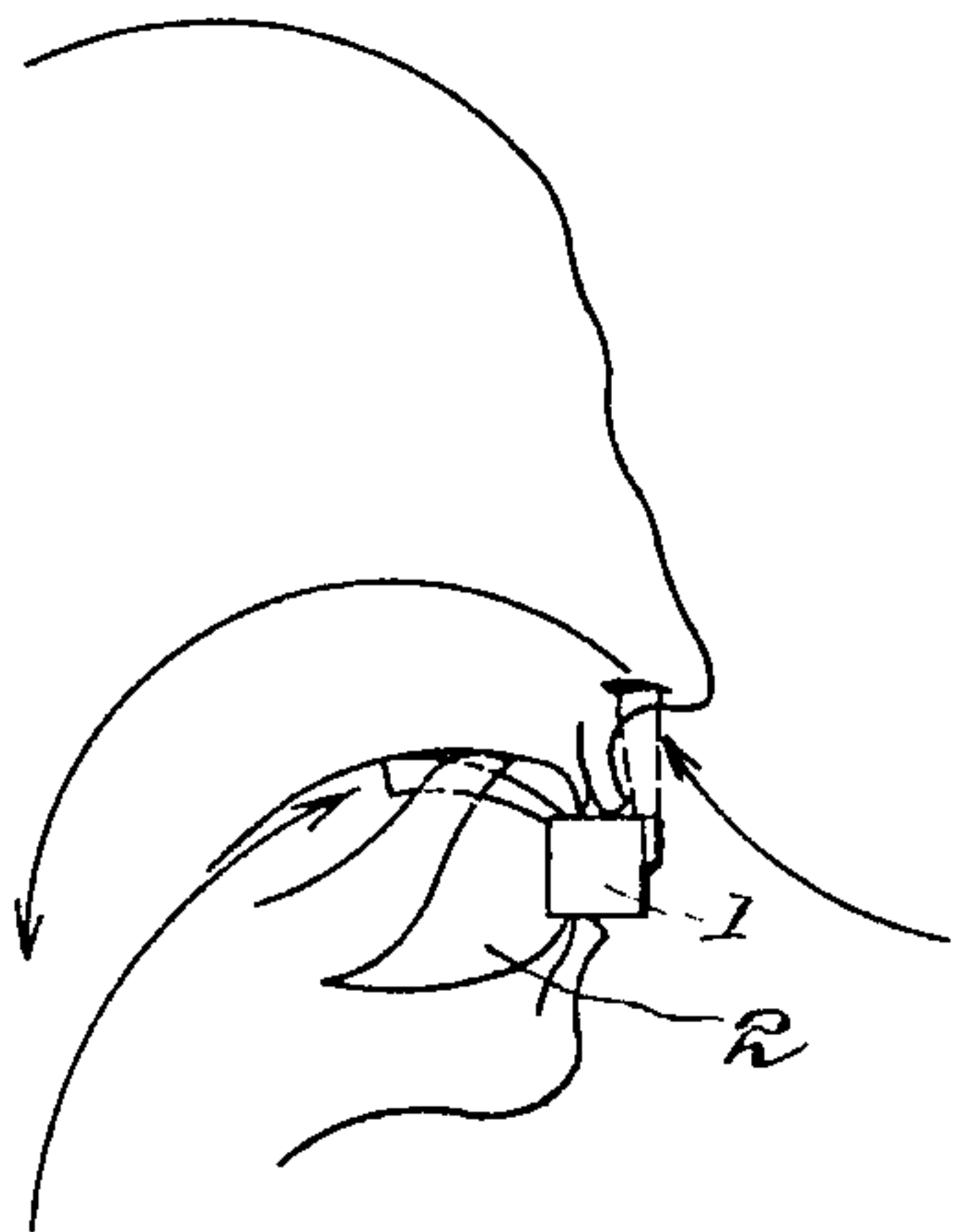


Fig. 2.

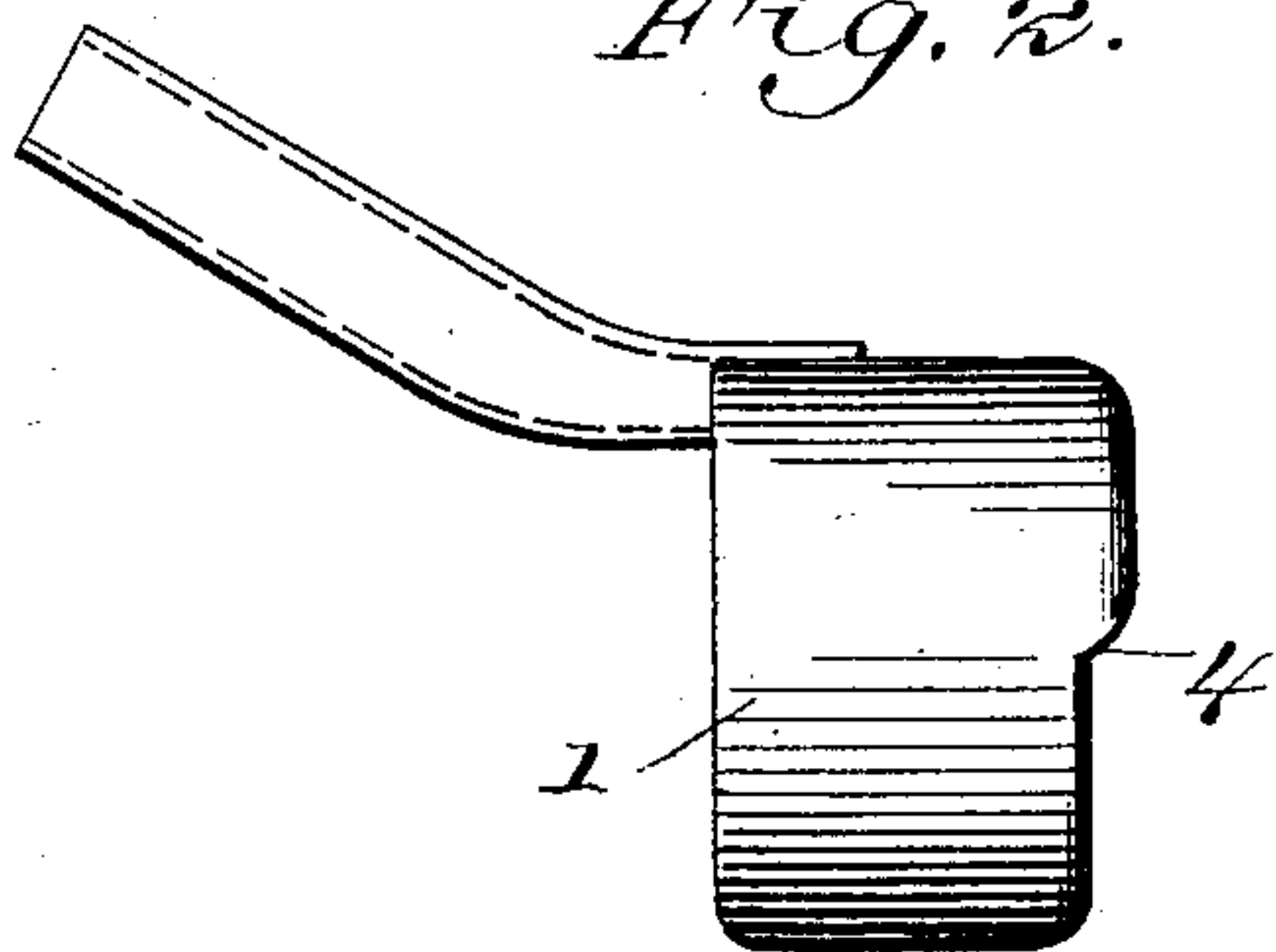


Fig. 3.

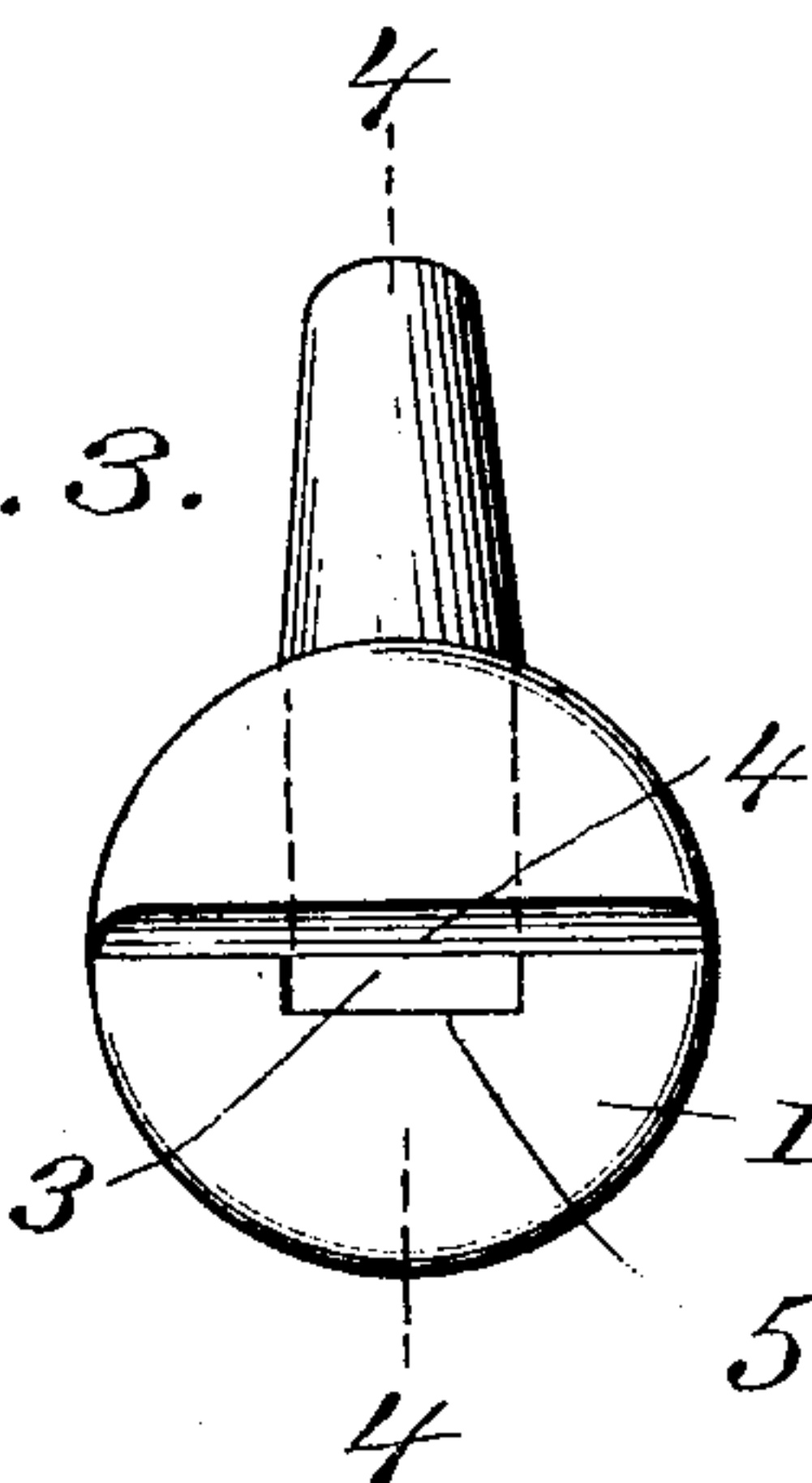
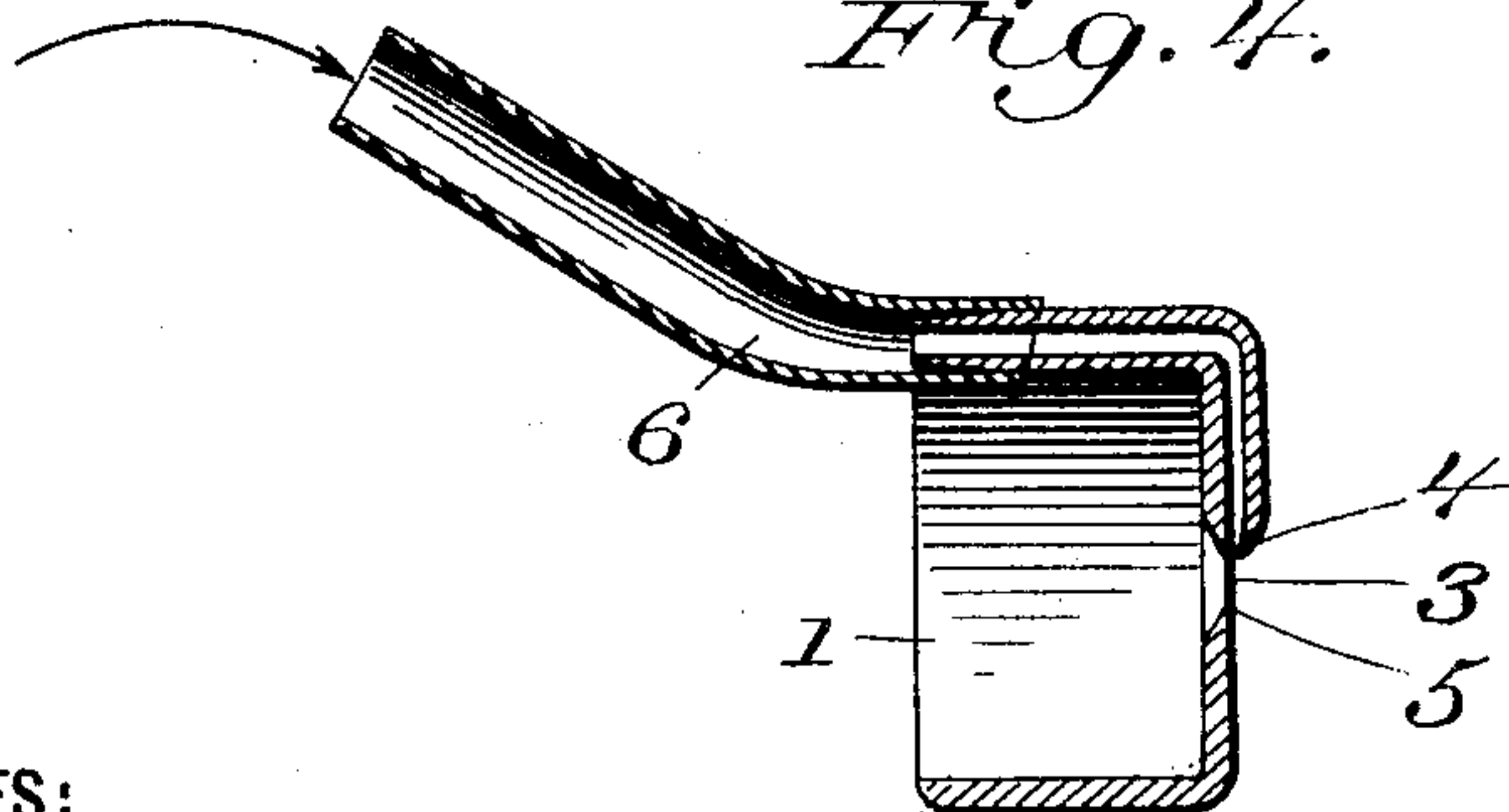


Fig. 4.



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ALBERT LEECH AND GARRETT J. COUCHOIS, OF NEW YORK, N. Y.

SELF-PLAYING WHISTLE.

SPECIFICATION forming part of Letters Patent No. 641,025, dated January 9, 1900.

Application filed January 26, 1899. Serial No. 703,416. (No model.)

To all whom it may concern:

Be it known that we, ALBERT LEECH and GARRETT J. COUCHOIS, residing at New York, in the county of New York and State of New York, have invented a new and useful Improvement in Self-Playing Whistles, of which the following is a specification.

Our invention relates to sounding toys, and more particularly to a class of whistles by which tones varying in pitch may be produced.

The device is especially adapted for the use and amusement of young people and children in that any familiar melody within the range of the whistle may be readily reproduced without previous instruction or practice and in a perfectly natural manner much similar to whistling.

The novelty of the invention lies in the combination, with a sound-producing device, of a casing communicating with the mouth-cavity of the operator and utilizing the muscular contraction and expansion of said cavity, to vary the pitch of tone of the sound-producing device, as will be hereinafter described and claimed.

One embodiment of the invention is illustrated in the accompanying drawings, in which similar reference characters indicate like parts throughout the several views.

Figure 1 is a view in diagram illustrating the position of the whistle when in use. Fig. 2 is a view in side elevation of the device. Fig. 3 is a view in front elevation thereof, and Fig. 4 is a sectional view taken on the line 4 4 of Fig. 3.

In the drawings, 1 represents a cup-shaped casting which, in connection with the lower cavity of the mouth 2, as indicated in Fig. 1, serves to inclose a column of air.

It is well known—as, for example, in organ construction—that with a column of air of determined length a tone of a certain pitch of vibration may be produced; also, that by varying the column a corresponding variation in tone will follow, and, finally, that through the agency of efficient controlling means such variations may be made to produce any melody within the range of the instrument. Similarly by the muscular contraction and expansion of the mouth-cavity

the inclosed column of air may be increased or diminished to vary the pitch of tone of the whistle, the sound-producing device of which will now be described.

3 represents an opening similar to the mouth of an organ-pipe; 4, the upper lip thereof; 5, the lower lip, and 6 the flue for conveying the air, the latter being formed in part by an interior passage in the upper wall of the casing and extended rearward in the form of a short length of tubing, which is pressed against the roof of the mouth by the tongue, thus leaving the air in the lower cavity of the mouth inert.

It will be understood that various modifications of the sound-producing device herein referred to may be employed for producing tones of different quality; also, that by leading a series of branches from the air-conveying flue a corresponding series of sound-producing devices may be operated from the flue proper, thus increasing the volume of tone of the whistle.

In use the open end of the cup-shaped casing is placed in the mouth and encircled by the lips, while the tongue presses the tube upward against the roof of the mouth, thus closing off the lower cavity from the tube and bringing the latter into communication with the source of air-supply of the body. Assuming that the device is in position as described, it is only necessary to blow through the tube, and by proper expansion or contraction of the mouth-cavity the pitch of tone may be changed at will. Similar results may be obtained by inserting the end of the tube direct into the nostril, as indicated by dotted lines in Fig. 1.

Having thus described our invention, what we claim as new is—

1. A whistle, comprising an air-chamber adapted to form a continuation of the mouth-cavity and a sound-producing device communicating with the chamber and relatively arranged to act upon the inclosed air and provided with a tube through which an independent supply of air is maintained by the operator, as specified.

2. A whistle provided with an air-chamber and a mouthpiece through which communication is established with the mouth-cavity

of the operator, a sound-producing device relatively arranged to cooperate with the enclosed column of air in the chamber and mouth-cavity and means for conducting an
5 independent supply of air maintained by the operator, to the sound-producing device, as specified.

In testimony whereof we affix our signatures in the presence of two witnesses.

ALBERT LEECH.

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Witnesses:

BLANCHE S. BETTMAN,

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