

S. R. DIVINE.
TOY MUSICAL INSTRUMENT.
APPLICATION FILED FEB. 6, 1909.

931,578.

Patented Aug. 17, 1909.

Fig. 1.

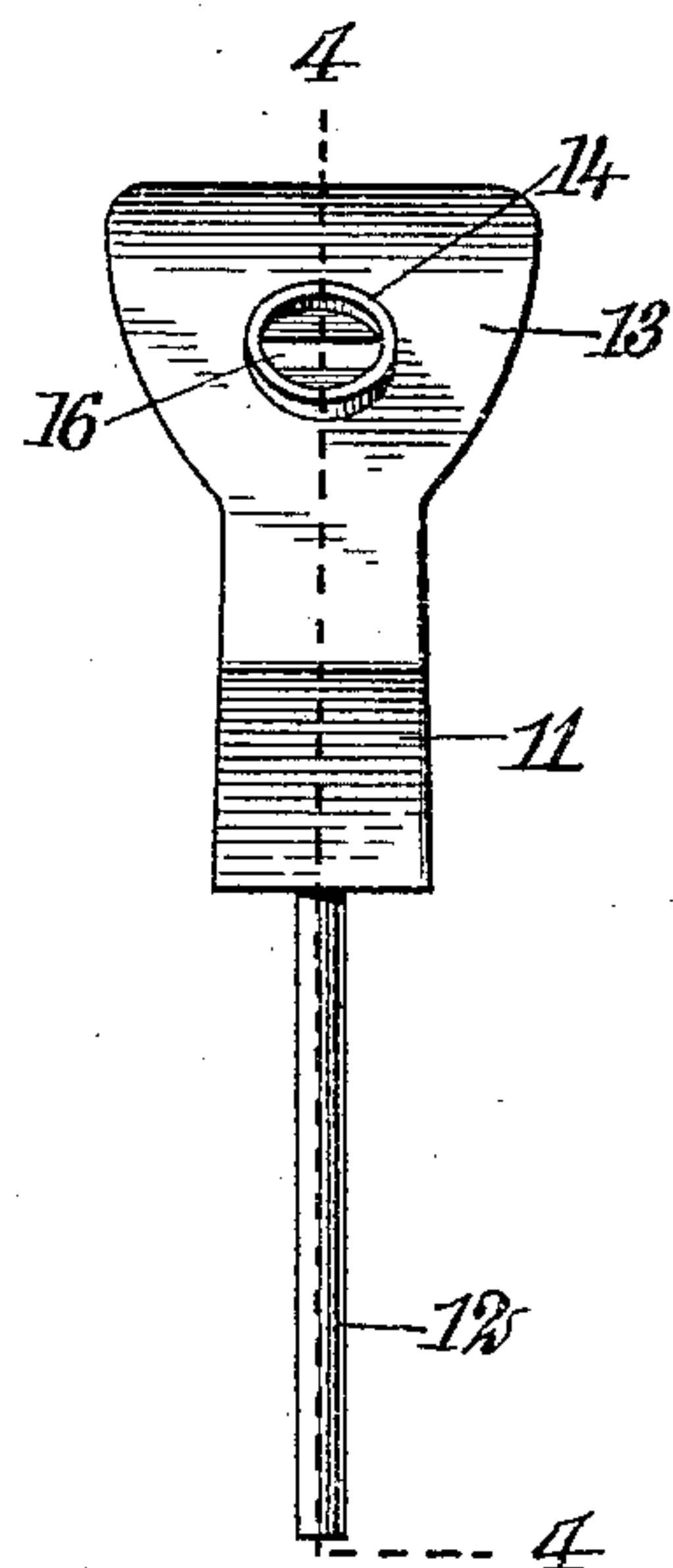
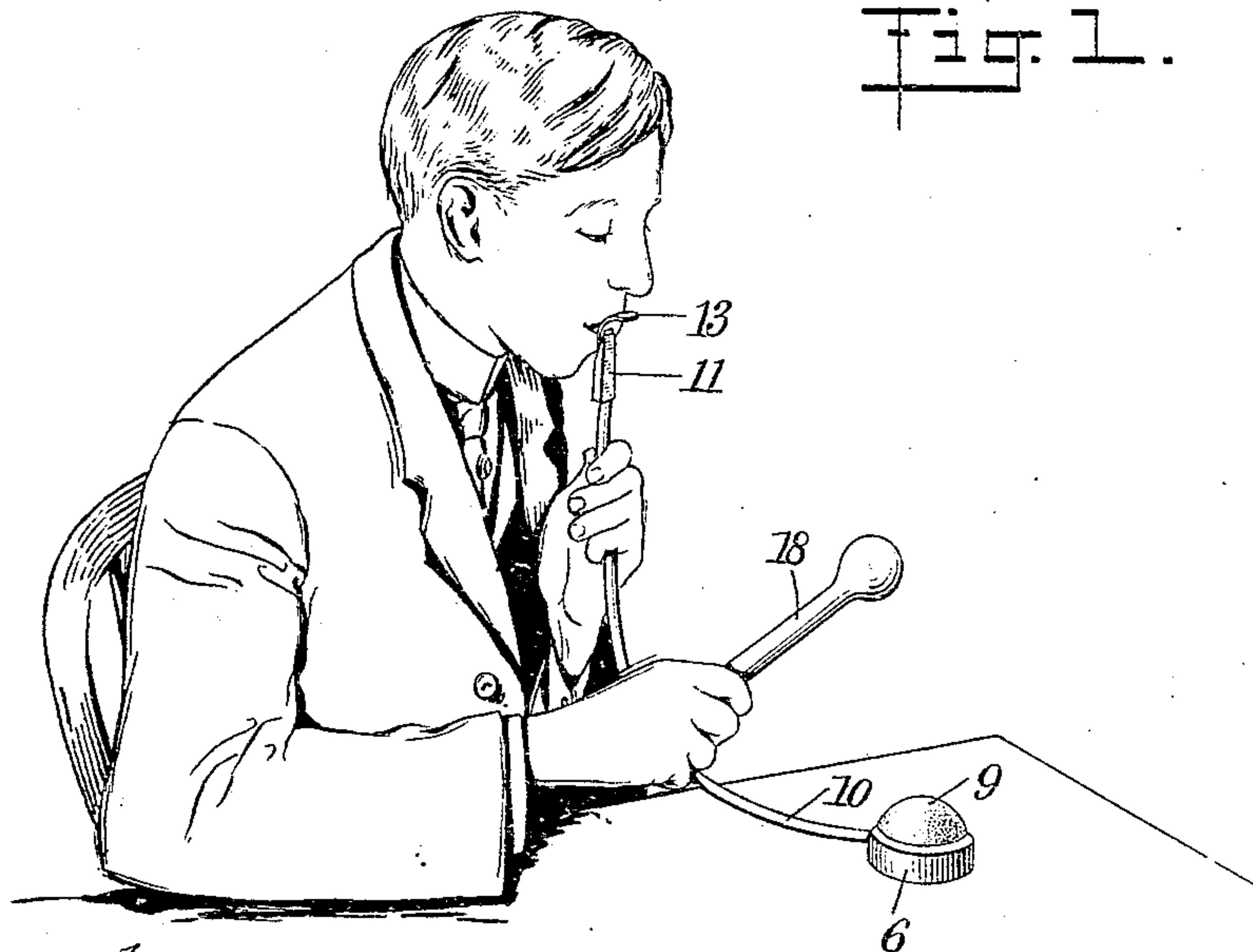


Fig. 3.

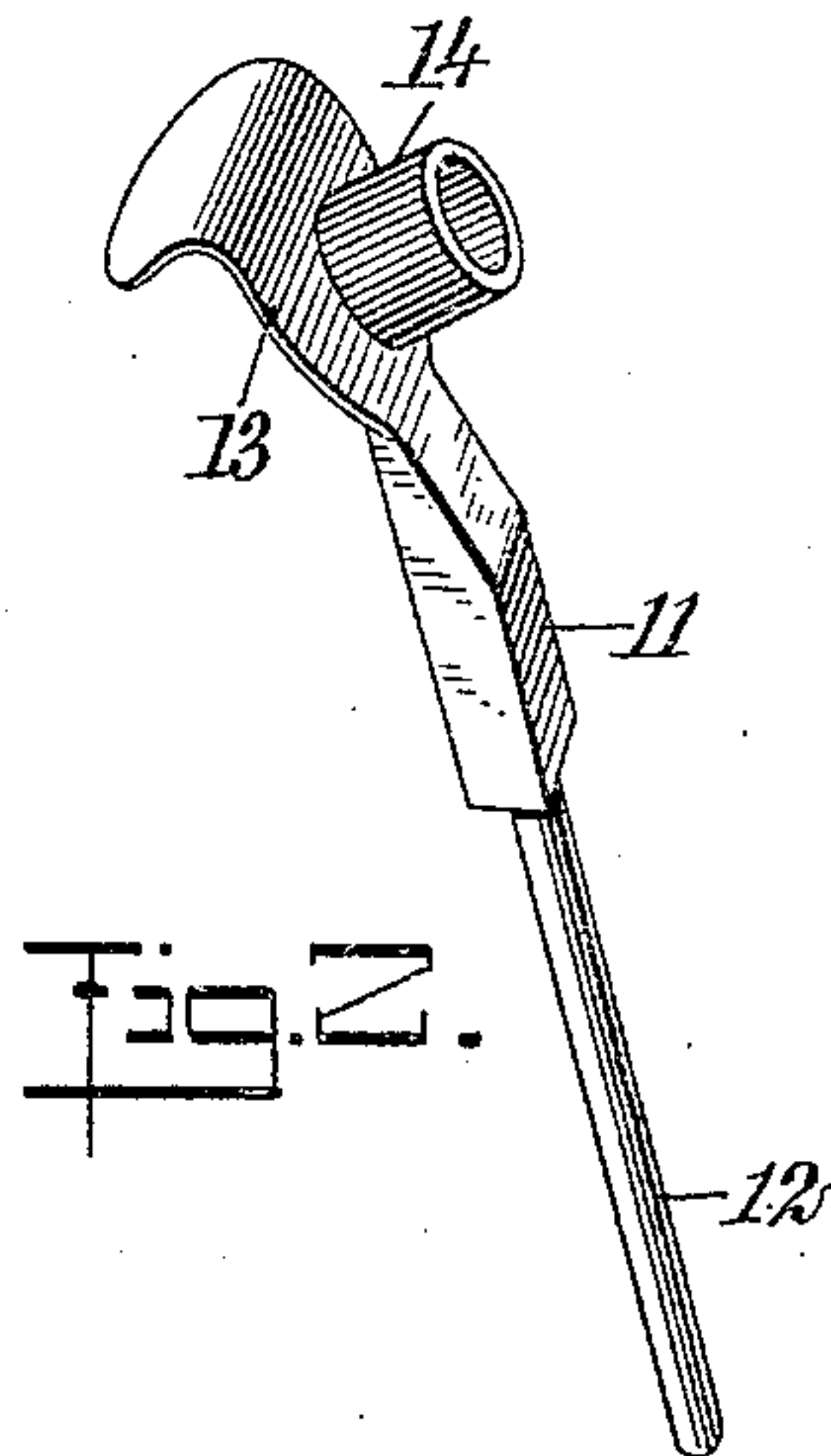


Fig. 2.

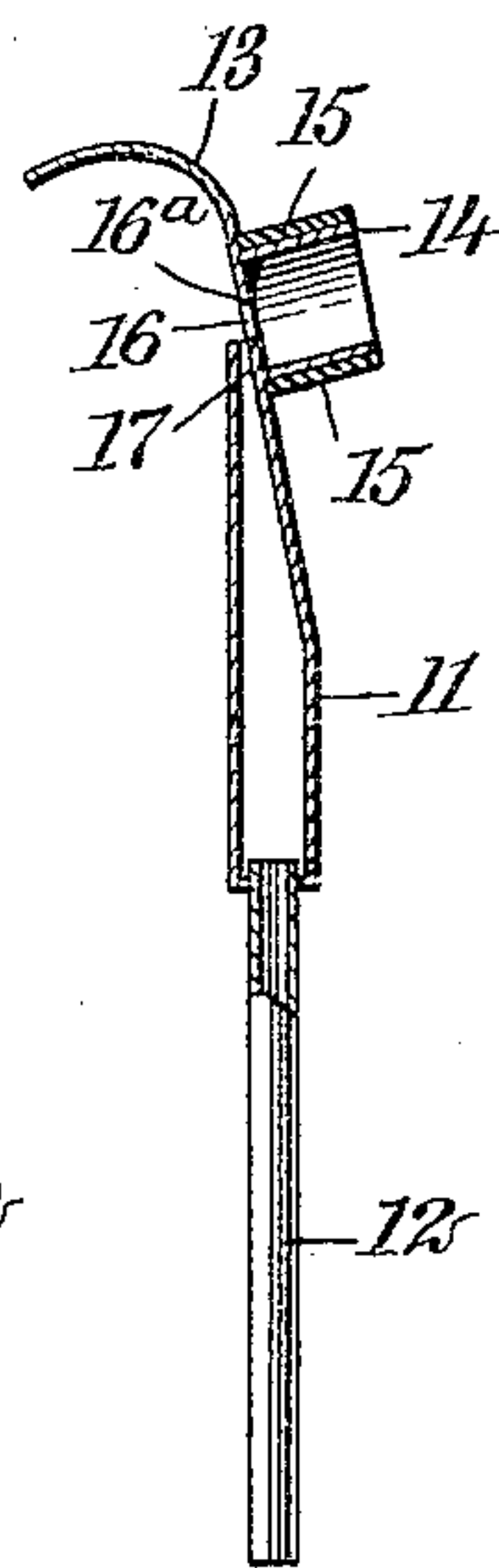


Fig. 4.

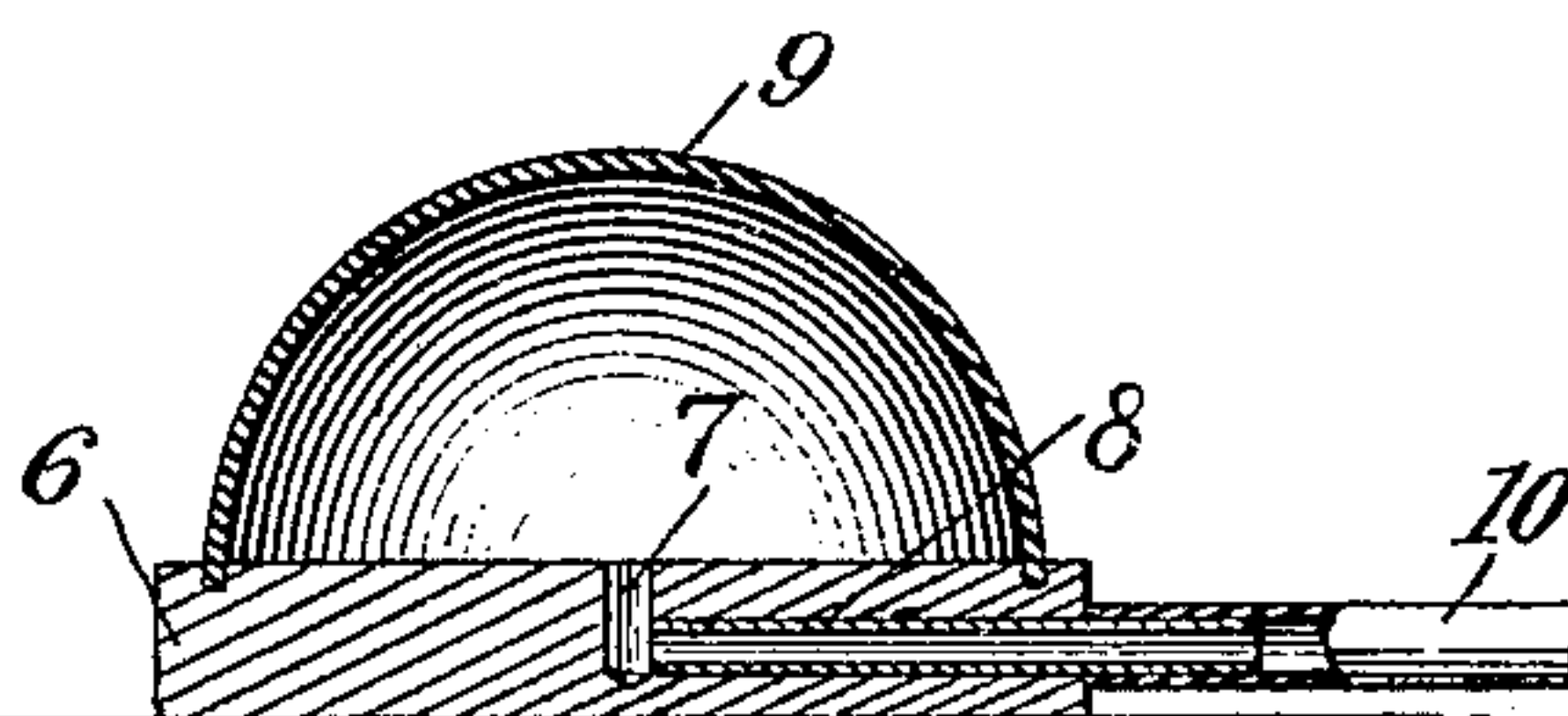


Fig. 5.

WITNESSES

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UNITED STATES PATENT OFFICE.

SILAS R. DIVINE, OF LOCH SHELDRAKE, NEW YORK.

TOY MUSICAL INSTRUMENT.

No. 931,578.

Specification of Letters Patent.

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Application filed February 6, 1909. Serial No. 476,355.

To all whom it may concern:

Be it known that I, SILAS R. DIVINE, a citizen of the United States, and a resident of Loch Sheldrake, in the county of Sullivan and State of New York, have invented a new and Improved Toy Musical Instrument, of which the following is a full, clear, and exact description.

My invention relates to toy musical instruments, my more particular purpose being to provide a device in which an air jet, controllable by the stroke of a stick or the like, is caused to make a whistling sound, the pitch of which is variable and controllable by the operator's mouth which serves as a resonating chamber.

More particularly stated, my invention comprehends a bellows to be struck by a stick manipulated by hand, and connected with the bellows by a tube is a member more or less analogous to a whistle and actuated by pulses of air from the bellows, so as to sound a note, the device being further provided with a tubular member upon which the operator places his mouth and uses the latter as a resonating chamber of variable capacity, changing the tone emitted by the instrument.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective showing the device in use; Fig. 2 is an enlarged perspective showing the member which I designate as a whistle, this member being shown as detached from the rubber tube wherewith it is associated in use; Fig. 3 is a front elevation of the whistle and parts accompanying the same; Fig. 4 is a view partly in section on the line 4—4 in Fig. 3, and partly in elevation, showing the internal construction of the whistle and parts accompanying it; and Fig. 5 is a substantially central vertical section through the bellows, showing how the rubber tube is attached to it.

A circular base 6 is provided centrally with a passage 7, and communicating with the latter is a tube 8 which extends into the base. A rubber bulb 9 having generally the form of a hemisphere is mounted upon the base 6, and may be depressed by a stroke of the finger or of a stick manipulated by hand.

At 10 is a rubber tube which fits over the outer end of the tube 8, and consequently communicates with the passage 7.

At 11 is a hollow member which I designate as a whistle. The lower portion of this whistle is provided with a tube 12, fitted rigidly thereto and the upper portion of the whistle is provided with a plate 13. The top of this plate is curved as indicated in Fig. 4.

Mounted upon the plate 13 is a tube 14 encircled by a band 15, this band being removable. The tube 14 and band 15 are adapted to enter the operator's mouth, as will be understood from Fig. 1. The purpose of the band 15 is to render the use of the device sanitary. This band being removable may be thrown away and replaced by another band similar to it, and this may be done, if desired, as often as the device is used. The plate 13 is provided with an orifice 16 which is bounded upon one side by a lip 16^a.

At 17 is an air passage which is substantially in alinement with the lip 16^a. A jet of air passing through the whistle is guided by the passage 17 directly against the lip 16^a so as to make a whistling sound.

At 18 is a stick having generally the form of a drum stick and manipulated by hand for the purpose of striking the bulb 9.

The operation of my device is as follows: The parts being connected as indicated in Fig. 1, the operator places his lips over the tube 14 and band 15 (as indicated in this figure). The operator then, by varying the position of his tongue and using his mouth as a resonating chamber, may vary the pitch of the whistling sound emitted by the device, this sound taking place whenever the stick 18 strikes the bulb 9. The operator may thus play a tune, striking the bulb 9 continuously, and by aid of his mouth changing the pitch of the sounds.

I have found that if the tube 10 be made of great length, the air pulsations passing through it are retarded slightly before reaching the whistle, so that when the device is operated, the sounds occur after a perceptible interval from the instant when the stick strikes the bulb 9. This effect is quite curious and entertaining.

While the bulb 9, base 6 and parts immediately associated therewith, constitute a type of bellows, I do not limit myself to this

exact construction for the reason that bellows of other types, or devices equivalent to bellows, may be employed instead.

The tube 14 always has some little capacity or volume, and consequently the device, while in action, always makes a note of some kind though the note may be exceedingly shrill if the operator's tongue happens to be against the end of the tube 14.

By varying the sizes and proportions of the parts the sound which is primarily a whistling sound may be varied within considerable limits, and such being the case, the sounds may be considered as musical notes of high frequency.

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

1. A musical instrument, comprising a whistle, constructed to be engaged by the human mouth for the purpose of causing said mouth to act as a resonating chamber for said whistle, a tube connected with said whistle, and manually-operable mechanism for sending pulses of air through said tube to said whistle.

2. A device of the character described, comprising a hollow member provided with an air passage and with a lip disposed substantially in alinement with said air passage for the purpose of producing a sound, a tube mounted upon said member and adapted to fit into the human mouth in order to enable the mouth to act as a resonating chamber, and means controllable at will for supplying air pulses into said hollow member.

3. A device of the character described, comprising a bellows adapted to be manipulated by hand, and a hollow member actu-

ated by air pulses and adapted to emit a sound, said member being provided with a portion to be engaged by the human mouth in order that the mouth may serve as a resonating chamber for varying the character of the sounds emitted.

4. A device of the character described, comprising a base, a bulb of resilient material mounted thereupon and adapted to be compressed when struck, a tube connected with said base and communicating with the interior of said bulb, and a sounding member connected with said tube and supplied thereby with air pulses, said sounding member being provided with a portion to be engaged by the human mouth for the purpose of enabling said mouth to serve as a resonating chamber.

5. A device of the character described, comprising a hollow member provided with an air passage, and further provided with an orifice and with a lip bounding said orifice, said lip being substantially in alinement with said air passage for the purpose of sounding notes, a tube mounted upon said hollow member and communicating with said orifice, said tube being adapted to fit into the human mouth in order to enable the mouth to serve as a resonating chamber, and means controllable at will for forcing air currents into said hollow member.

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

SILAS R. DIVINE.

Witnesses:

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MARTHA SHERWOOD.