L. V. ARONSON.
TALKING TOY MECHANISM.
APPLICATION FILED FEB. 8, 1915.

1,140,649. Patented May 25, 1915.

Fig. 1

Fig. 2

Fig. 3

WITNESSES
John D. Bager
A. Welden Bills

INVENTOR
Louis V. Aronson

ATTORNEY
UNITED STATES PATENT OFFICE.

LOUIS V. ARONSON, OF NEWARK, NEW JERSEY.

TALKING-TOY MECHANISM.

1,140,649.


Application filed February 5, 1915. Serial No. 6,031.

To all whom it may concern:

Be it known that I, Louis V. Aronson, a citizen of the United States, and a resident of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Talking-Toy Mechanism, of which the following is a specification.

The invention relates to improvements in so-called talking toys, and more particularly to mechanism for controlling the character of the sound to be emitted thereby.

It has for its object to simplify such mechanism and reduce its cost, as well as to render the said mechanism more positive in its action and less likely to operate unsatisfactorily or become totally inoperative under the rough treatment to which toys of this character are generally subjected.

The nature of the invention will be best understood when described in connection with the accompanying drawings, in which—

Figure 1 shows in perspective a bellows and reed pipe or the like, together with the mechanism for controlling the sound emitted thereby. Fig. 2 is a similar view showing the mechanism located at the side of the bellows. Fig. 3 illustrates, in perspective, a modification.

Similar characters of reference designate corresponding parts throughout the several views.

Referring to Fig. 1 of the drawings, 10 and 11 designate the members of the bellows which are hingedly connected at one end and normally held in distended position by means of a spring 12, as is well understood. The bellows is adapted to be suitably secured in position within the body of the toy (not shown) and is actuated by pressing upon some portion of the toy, all of which is well understood and forms no part of the present invention which has for its object the control of the character and duration of the sound emitted when the said bellows is being compressed. The member 11 carries at its upper surface the usual reed pipe 13 or the like and which communicates with the interior of the bellows, one end of said pipe extending also into a sound box 14, Figs. 1 and 2 and which is provided with an orifice 15. The sound box 14 is located with respect to the bellows that its said orifice 15 is substantially flush with the front of the bellows, Fig. 1, or with the side of the bellows, Fig. 2. The orifice 15 is normally closed by the end portion of a control member 16, preferably in the nature of a thin resilient plate which is fixedly secured to the front of the member 10 and curved substantially to conform to an arc described about the axis of the bellows hinge. This permits the plate to move freely past the orifice 15 as the bellows is compressed; and due to the resiliency of said plate, the same will be pressed against the sound box 14 with sufficient force to insure a satisfactory closing of the orifice 15 thereby. The plate 16, moreover, is provided with openings or perforations 17 and 18 between its upper and lower portions and which are aligned with the orifice 15 and adapted to register therewith as the bellows is compressed to enable the desired sound to be emitted. The length of these openings may be made to suit the desired duration of the sound emitted and in the present example the opening 18 is shown longer than the opening 17. The distance between the openings, also, may be altered to suit the result desired.

In Fig. 2, the plate 16 is substantially straight but of sufficient resiliency to press with the desired force against the sound box 14 in order to close its orifice 15; and the openings 19 and 10 remain conform to an arc described about the axis of the bellows hinge.

In Fig. 3, the sound box is omitted entirely and a reed pipe 20 is arranged to terminate in an orifice 21 which is substantially flush with the side of the member 11. A slide member or plate 22 is mounted upon the side of the member 11, as by means of a squared pin 23 and washer 24, the former passing through a slot 25 of said plate. A connecting rod 26 is pivotally secured to the plate 22 and to the side of the lower member of the bellows whereby, as the bellows is compressed, movement will be communicated to said plate 22 to advance the same past the orifice; and when the bellows is again distended under the action of the spring 12, the plate will return to its normal position in which it serves to close the orifice 21 against which it bears. Plate 22 is, moreover, provided with suitable openings or perforations 27 or 28 in alignment with the orifice 21 and adapted to register there with during the reciprocation of the plate, causing the desired sounds to be emitted as
in the case of the previously described mechanism.

I claim:

1. Sound controlling device for talking toys, comprising: a reed pipe or the like provided with an orifice, and a suitable bellows carrying said reed pipe and adapted to operate the same; and a control piece fixed to one member of the bellows and provided with suitable openings adapted to register with the said orifice of the reed pipe or the like when the bellows is compressed.

2. Sound controlling device for talking toys, comprising: a reed pipe or the like provided with an orifice, and a suitable bellows carrying said reed pipe and adapted to operate the same; and a control piece attached to one member of the bellows and provided with a plurality of openings of different length adapted to successively register with the said orifice of the reed pipe as the bellows is compressed.

3. Sound controlling device for talking toys, comprising: a reed pipe or the like provided with an orifice, and a suitable bellows carrying said reed pipe and adapted to operate the same; and a resilient control piece secured to one member of the bellows and normally closing said orifice of the reed pipe or the like and provided with suitable openings adapted to register with said orifice as the bellows is compressed.

4. Sound controlling device for talking toys, comprising: a reed pipe or the like provided with an orifice, and a suitable bellows carrying said reed pipe and adapted to operate the same, the orifice of said reed pipe or the like being located substantially at the front of one member of the bellows; and a resilient control piece secured to the front of the other member of said bellows, curved to conform substantially to an arc described about the axis of said bellows and extending over the front of the bellows to normally close the said orifice of the reed pipe and provided with suitable openings adapted to successively register with the said orifice as the bellows is compressed.

Signed at Newark, in the county of Essex and State of New Jersey this 4th day of February, A. D. 1915.

LOUIS V. ARONSON.

Witnesses:

FREDK. F. SCHUETZ,
ALEXANDER HARRIS.