No. 700,850. Patented May 27, 1902.

J. STONE, Dec'd.

R. STONE, Administratrix.

MUSICAL BALL.

(Application filed May 1, 1900. Renewed Oct. 2, 1901.)

(No Model.)

Fig. 1.

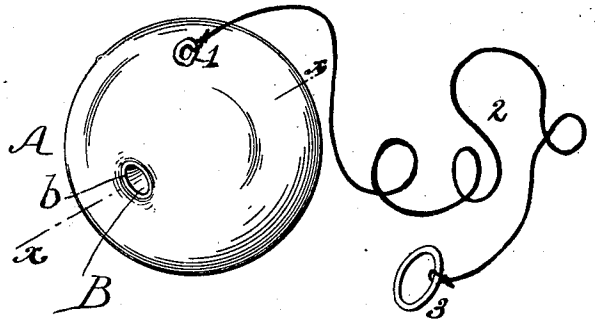


Fig. 2

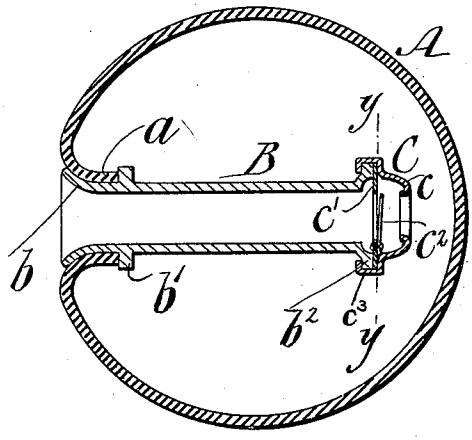


Fig. 3.



WITNESSES

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JULIUS STONE, OF BOSTON, MASSACHUSETTS; RACHEL STONE ADMINISTRATRIX OF SAID JULIUS STONE, DECEASED.

MUSICAL BALL.

SPECIFICATION forming part of Letters Patent No. 700,850, dated May 27, 1902.

Application filed May 1, 1900. Renewed October 2, 1901. Serial No. 77,702. (No model.)

To all whom it may concern:

Be it known that I, JULIUS STONE, a citizen of the United States, and a resident of No. 8 Vine street, Charlestown, Boston, county of Suffolk, and State of Massachusetts, have invented certain new and useful Improvements in Musical Balls, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

My invention relates to a toy embodying a combined hollow spherical or other shaped envelop and a harmonica; and the object thereof is to provide a device of this character which is applicable for ordinary usage as a toy, ball, &c., and which embodies in its construction a sound-producing device so arranged interiorly of the hollow ball or other envelop as not to impair its effectiveness or utility when used as a ball, toy, &c.

The invention will be hereinafter fully described, and specifically set forth in the annexed claim.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view of my improved ball; Fig. 2, a central sectional elevation taken on the line x x of Fig. 1, and Fig. 3 a transverse sectional elevation taken on the line y y of Fig. 2.

In the practice of my invention as illustrated in the drawings I employ, primarily, a normally-expanded hollow elastic ball or envelop A, which is composed of rubber or other similar resilient air-tight material. Leading into the cavity of the ball A is a sleeve or flange a, which embodies an integral part of the ball A and which engages around the flaring mouth b of a tube B, which is preferably composed of wood, but may be made of tin or other metal, if desired. This tube is extended into the cavity of the ball and is supplied with a collar b', which engages the inner edge of the sleeve a to prevent accidental removal of the tube, and the said tube B is securely attached to the sleeve a by means of cement, whereby escape or inlet of air between the tube and sleeve is prevented, and air is admitted and discharged from the envelop only through the tube B.

On the inner end of the tube B is formed an outwardly-projecting annular flange or tongue b^2, which engages the musical device C. This device consists of a case c, open both ways. At c^3 there is an internal annular groove extending entirely around its internal circumference. This groove is adapted to fit on the tongue b^2. c', which is a circular reed-plate, is adapted to fit against the tongue b^2, and the groove c^3 embraces the edge of this reed-plate and the tongue b^2, so that the parts are held firmly in proper position. In this plate c' are fastened and riveted the reeds c^2, of which there may be any desired number.

The cylinder or tube B extends nearly across the cavity of the envelop or ball A, and the outer flared end b is countersunk beneath the surface of the envelop, whereby the tube cannot be injured by rough usage of the device as a ball, and its general effectiveness is not impaired.

The invention is adapted especially for use as a "returning ball," and when so used a ring, loop, or eye, as 1, is attached to the envelop or formed integral therewith, as desired. To this ring is secured one end of the elastic string 2, which has the finger-ring 3 secured to its opposite end; but I do not confine myself to the application of my invention to a returning ball, as it may be a simple ball, if desired, and it is obvious that the contour of the envelop is not material to the successful operation of the device. It may be made egg-shaped, or the shape of an animal may be employed.

In the operation and use of the device it is obviously normally filled with air, and the reeds close the valves of the harmonica-plate c to a sufficient extent to prevent easy escape of air from the envelop when the device is used as a ball, whereby it will not by reason of its weight collapse and impair its usefulness as a ball, while at the same it may readily be employed as a musical-sound-producing device by the simple act of collapsing the envelop toward the tube B, which contracts the inner area of the envelop and forces its contained air through the reeds of the harmonica to produce the required sound.

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

In a musical ball, the combination with the hollow spherical case A, the flange a, projecting into said case, the ring 1, integral with the outer surface of said case, the ring 3, and the cord 2, connecting said rings, as specified, of the tube B, flared at b, having collar b', and held, projecting into said case, by said flange a, embracing said flare b, resting on said collar b', the outwardly-projecting tongue b^2, upon the inner end of said tube B, the case c, the reed-plate c', in said case, reeds vibrating in said plate, and the annular groove c^3, in said case, embracing the edge of said reed-plate, and said tongue, and holding the parts in position all substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 26th day of April, 1900.

JULIUS STONE.

Witnesses:
A. V. McLEAN,
BENJAMIN JONES.