

No. 620,087.

Patented Feb. 21, 1899.

J. STEIN.
MUSIC BALL.

(Application filed Sept. 28, 1898.)

(No Model.)

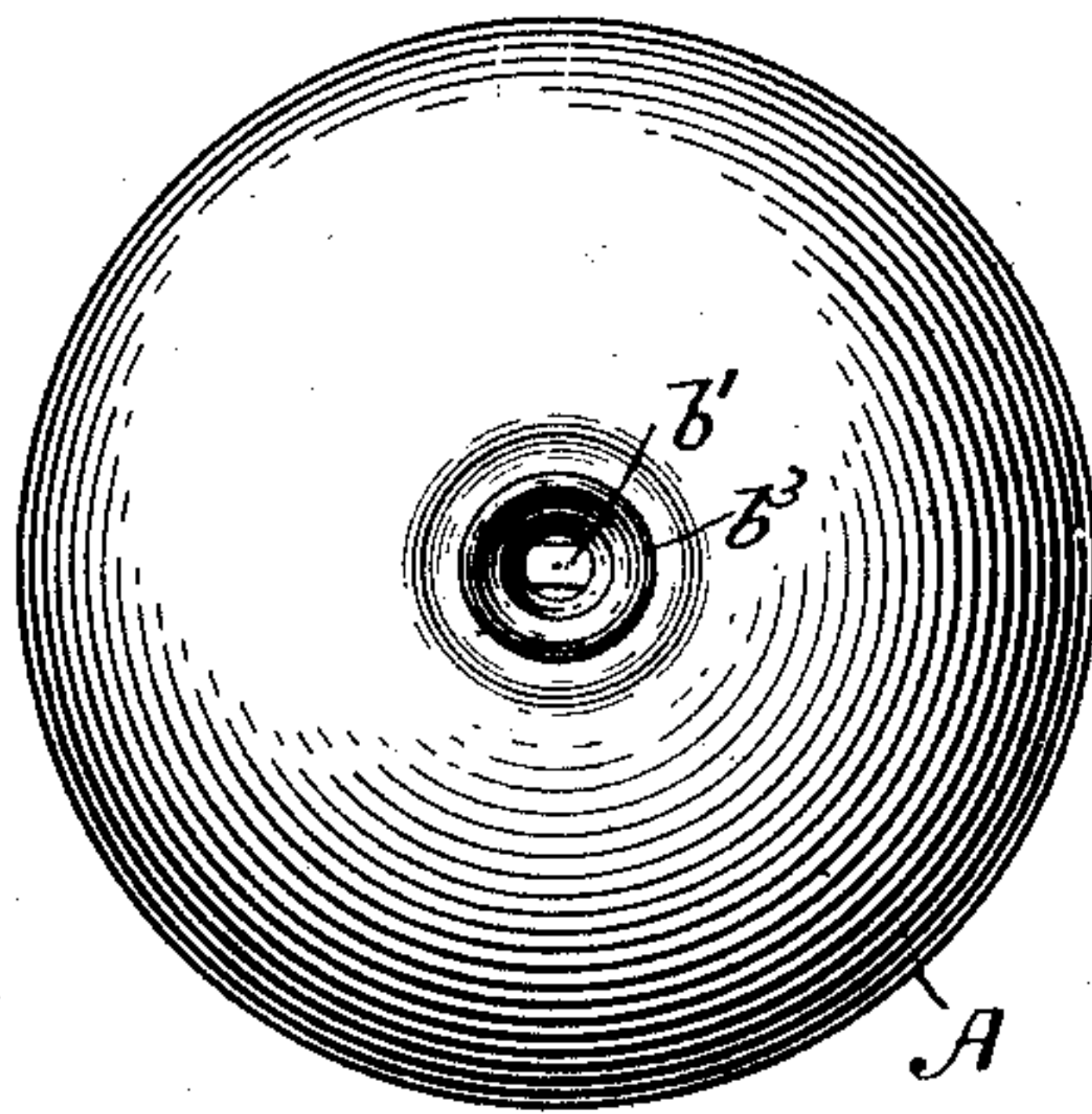


Fig. 1.

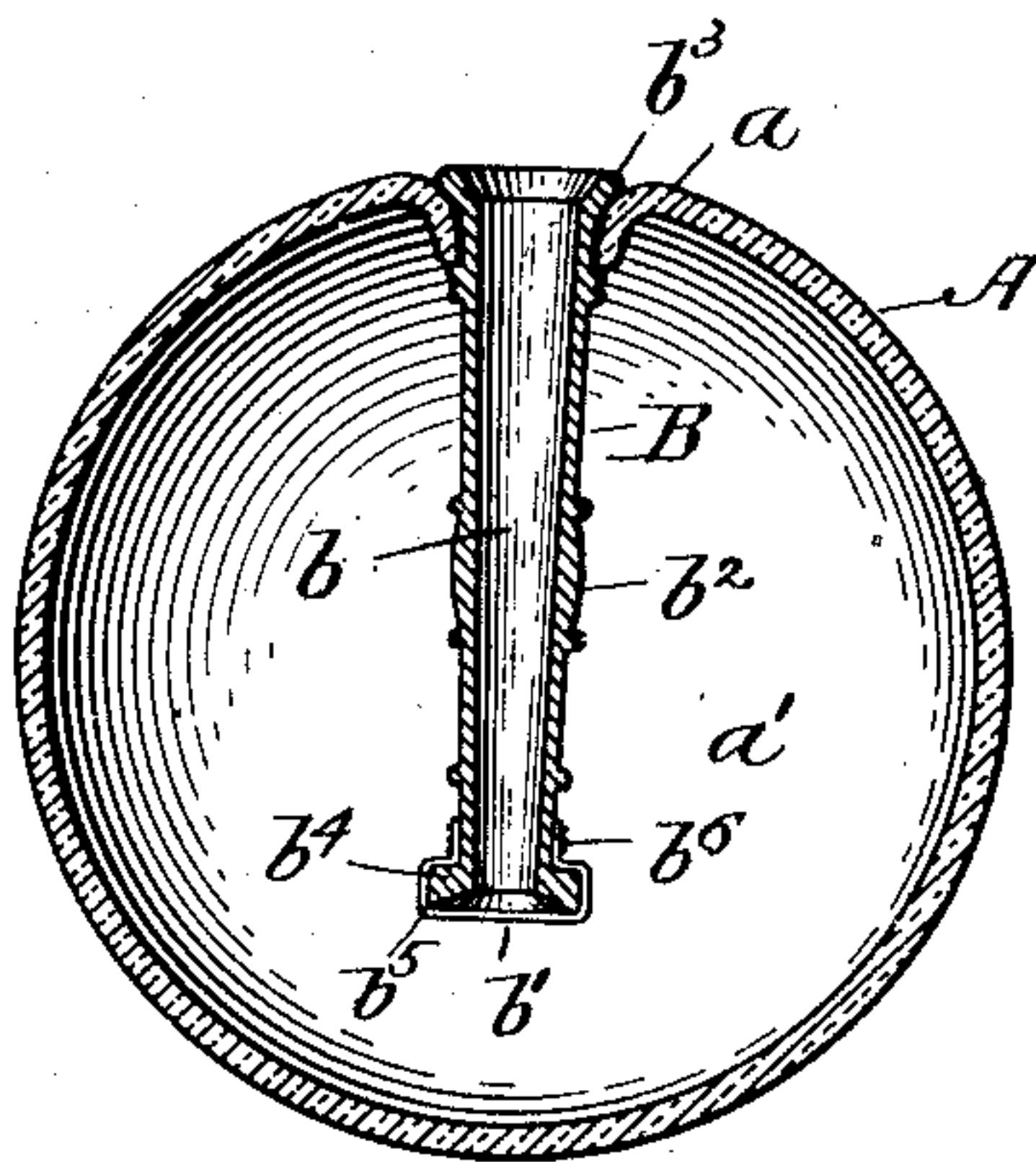


Fig. 2.

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UNITED STATES PATENT OFFICE.

JULIUS STEIN, OF BOSTON, MASSACHUSETTS.

MUSIC-BALL.

SPECIFICATION forming part of Letters Patent No. 620,087, dated February 21, 1899.

Application filed September 28, 1898. Serial No. 692,076. (No model.)

To all whom it may concern:

Be it known that I, JULIUS STEIN, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Music-Balls, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature.

The invention relates to a ball having a spherical envelop of elastic air-tight material forming a hollow air-reservoir which is air-tight, excepting as hereinafter specified, and a sound or music producing device which is located within the cavity of the ball, is held at its outer end by said envelop, has an entrance or mouth in line with or substantially in line with the outer surface thereof and at the outer end of a passage connecting the interior of the ball with the outer air and through which the air of the interior of the ball is adapted to be forced and through which also air is drawn into the cavity of the ball, and which passage has at its inner end, or adjacent thereto, a music-producing reed or device.

In the drawings, Figure 1 is a view in plan of the music-ball. Fig. 2 is a view in vertical section taken through the center of the music or sound producing device.

Referring to the drawings, A represents the elastic ball, and B the sound or music producing device, extending from the outer surface *a* of the ball into the cavity or air-chamber *a'* thereof, and which has the passage *b* connecting the air-chamber *a'* with the outer air, and which has across its inner end a sound or music producing reed or device *b'*. The ball is made of air-tight flexible material of a resilient nature which automatically extends or opens because of its resiliency and in expanding draws air to fill the air-chamber through the passage in the sound or music producing device, and by forcibly expelling this air through the device, either by hand or otherwise, the sound or music device is operated.

The sound or music device is represented

as provided by means of a wooden cylinder *b²*, the end *b³* of which extends through the envelop of the ball and is securely united to the ball by rubber cement and in a manner to prevent leakage at the joint. The inner end *b⁴*, which is contained in the ball, is concave and has a sharp edge *b⁵* surrounding the entrance to the passage *b* and across which a narrow strip *b'* of thin rubber, forming the reed, is stretched, the rubber being secured in its stretched state to the end of the cylinder by a winding *b⁶* of thread or string extending about the ends of the rubber and about a reduced portion of the cylinder adjacent to the end.

The wooden cylinder or sleeve extends very nearly across the cavity of the ball. The outer end is small and is contained within the spherical surface of the ball and does not modify or change the shape of the ball. The reed *b'* is at the inner end of the sleeve and so throttles the passage as to prevent the air with which the ball is filled from leaving it or being forced from it when the device is used as a ball, and thus prevents the application of the musical device to the ball from injuring its effectiveness as a ball, while, on the other hand, it may also at any time be used as a sound or music producing device without adding anything thereto or removing anything therefrom by collapsing the ball toward the side of the sleeve or cylinder, but not toward its inner end. By collapsing it toward the side the ball is elongated and the air forced into the inner end and through the passage of the sleeve. By collapsing the ball in the other direction the envelop is forced against the inner end of the sleeve and creases it.

Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States—

As an improved article of manufacture, a toy music-ball having a spherical air-tight collapsible rubber case or envelop and an inwardly-projecting sound or music producing device comprising a sleeve contained in the cavity of the case, the outer end of which is small and which is attached to the envelop

to be within the outer surface thereof, and which sleeve extends very nearly across the cavity of the ball and has a passage extending from its inner end to the outer air, which
5 passage is throttled by a narrow strip of thin rubber stretched across its opening, and whereby air is kept in the ball except when it is forced therefrom by pressure applied to the ball upon each side of the sleeve.

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Witnesses:

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