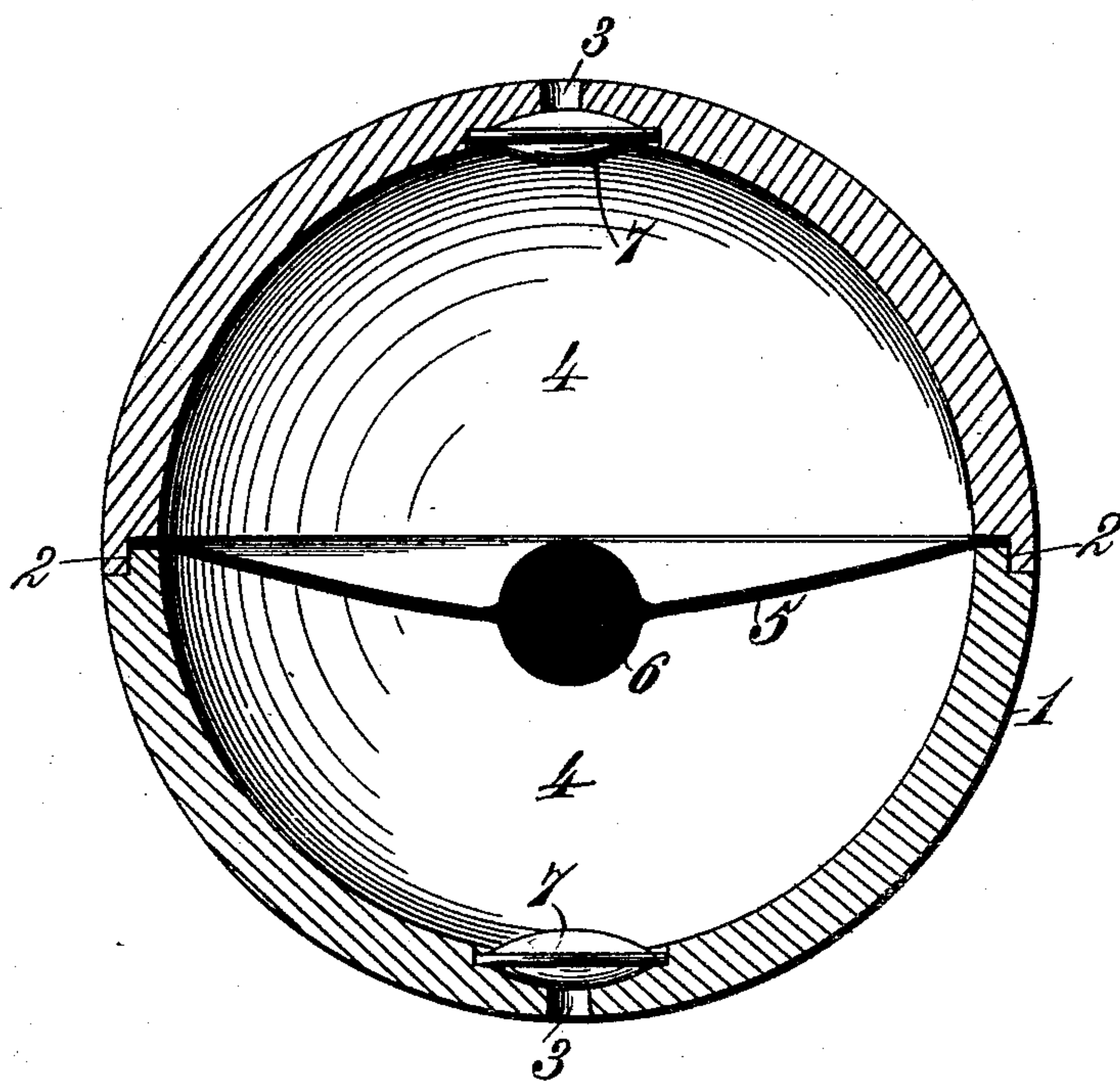


(No Model.)

R. B. WHITZEL.
SPORTING BALL.

No. 495,863.

Patented Apr. 18, 1893.



Witnesses.
Robert Emmett

J. A. Rutledge

Inventor.

Russel B. Whitzel

By

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Atty.

UNITED STATES PATENT OFFICE.

RUSSEL B. WHITZEL, OF COLUMBUS, OHIO, ASSIGNOR TO HIMSELF, WILLIAM FELTON, THOMAS E. KNAUSS, CHARLES G. LORD, AND THOMAS A. BEATON, OF SAME PLACE.

SPORTING-BALL.

SPECIFICATION forming part of Letters Patent No. 495,863, dated April 18, 1893.

Application filed September 21, 1892. Serial No. 446,422. (No model.)

To all whom it may concern:

Be it known that I, RUSSEL B. WHITZEL, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented new and useful Improvements in Sporting-Balls, of which the following is a specification.

This invention relates to that type of musical balls designed for sport or amusement, wherein a whistle is so applied to the ball that the motion of the latter in the air produces a whistling sound. In this class of balls as heretofore constructed a string or cord is connected with a flexible diaphragm, or with a spring-plunger located inside the ball, in such manner that when the latter is thrown or moved the diaphragm or plunger expels air from the interior of the ball through the whistling attachment to sound the latter. Where a flexible diaphragm has been used with a string connected therewith, a single whistle attachment only has been possible and this gives unsatisfactory results, while the plunger arranged in a ball having a duplex whistle attachment requires the use of a spring to move the plunger in a direction opposite to that in which it is moved by the string or cord. The prior devices are also expensive and the presence of the strings or cords is objectionable in that they are constantly breaking.

The objects of my invention are to simplify and improve musical balls; to avoid the use of strings or cords, and to provide novel means whereby a ball having a duplex whistling attachment is constructed with a diaphragm automatically operated for expelling air through either whistling attachment when the ball is thrown or moved in any direction.

To accomplish all these objects the invention consists essentially in a ball having a pair of musical attachments operated by wind, such as whistles, and a flexible weighted diaphragm arranged in the ball between the two musical attachments, in such manner that the weighted part of the diaphragm automatically moves the latter toward either musical attachment when the ball is thrown or moved.

The invention is illustrated by the accompanying drawing, in which the figure is a central sectional view of a ball or sphere embody-

ing my invention, the musical or whistling attachments being in side elevation.

In order to enable those skilled in the art to make and use my invention I will now describe the same in detail, referring to the drawing wherein—

The numeral 1 indicates a hollow ball or sphere such as ordinarily used for sport or amusement or other purposes. This ball may be composed of any material suitable for the conditions required, such as wood, metal, rubber, or celluloid or other pyroxyline compounds, and preferably it is bisected diametrically to form two half spheres the edges of which are rabbeted as at 2, and either detachably or permanently connected together. The half spheres are each provided with a central orifice 3, and the interior of the ball is divided into two air chambers 4, through the medium of a flexible diaphragm 5, composed of a thin sheet of rubber or any other material sufficiently strong and susceptible of a vibratory motion. The central portion of the diaphragm is provided with a weight 6, for automatically moving the diaphragm toward one or the other orifice 3, when the ball is thrown or moved, thereby causing the air to be expelled from one or the other air-chamber 4. The air is utilized in its passage from the air-chamber to sound a musical attachment 7, which I prefer to construct as an ordinary mouth-whistle, suitably secured to the ball at each orifice 3.

The diaphragm may be secured in the ball in any proper manner but as here exhibited the edge of the diaphragm is clamped between the rabbeted edges 2.

The weight on the diaphragm fulfills the conditions required to force the diaphragm toward either orifice 3 for the purpose of expelling the air and sounding either one of the musical or whistling attachments, and since the movements of the diaphragm are automatically effected by the momentum of the weight, I am enabled to dispense with extraneous devices, such as strings or cords, for operating the diaphragm when the ball is thrown.

My invention materially simplifies this type of sporting balls and enables them to be more economically manufactured while they give

better results and are more satisfactory and desirable in many respects than those musical or whistling balls having a diaphragm or a plunger connected with an operating string
5 as before explained.

The weight 6 may be of a material different from the diaphragm, or it may be composed of solid or other enlargements formed integral with the diaphragm, particularly if
10 the latter be of rubber.

The character of the musical or whistling attachments can be largely varied so long as they are susceptible of being sounded by the passage of wind or air.

15 I have alluded to the ball as being more particularly designed for sport or amusement, but it can be used for any purpose to which it is adapted.

Having thus described my invention, what I claim is— 20

A musical ball having a pair of musical attachments adapted to be operated by the passage of air, and a flexible, weighted diaphragm interposed between the two musical attachments and secured at its edge in the ball so
25 that it is automatically moved toward one or the other musical attachment when the ball is thrown or moved, substantially as described.

In testimony whereof I have hereunto set my hand and affixed my seal in presence of
30 two subscribing witnesses.

RUSSEL B. WHITZEL. [L. S.]

Witnesses:

ALBERT H. NORRIS,
J. A. RUTHERFORD.