(No Model.)

C. E. BALDWIN.

WHISTLING RETURN BALL.

No. 257,458. Patented May 9, 1882.

FIG. 1.

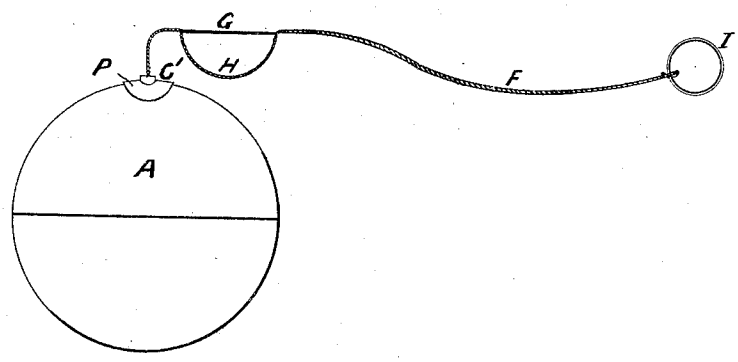
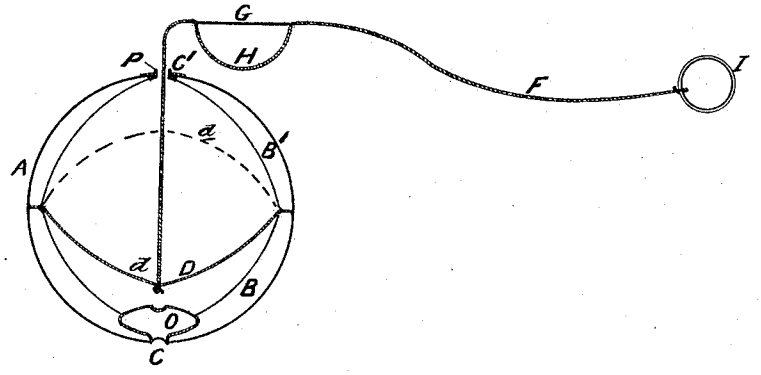


FIG. 2.



WITNESSES:

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WHISTLING RETURN-BALL.

SPECIFICATION forming part of Letters Patent No. 257,458, dated May 9, 1882.

Application filed February 15, 1882. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. BALDWIN, of the city and county of Albany, State of New York, have invented a new and useful Improvement in Whistling Return-Balls, of which the following is a specification.

This invention is designated as an improvement upon the musical return-ball for which Letters Patent No. 149,908 were issued to me April 21, 1874; and it consists of a hollow ball made in two axially-perforated sections and containing a whistle fixed over one axial hole, and containing also a fixed elastic diaphragm to which is secured a cord that extends outward through the opposite axial hole; and it further consists, in combination with the cord and diaphragm, of a short elastic string, all of which will be hereinafter set forth.

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

Figure 1 is a side elevation of the improved toy. Fig. 2 is a sectional elevation of the same.

In the drawings, A represents the ball, of which B is the lower half or section, and B′ the upper half or section. These sections, being cemented or otherwise secured together at their edges, form a hollow ball. Centrally in the ball-section B is formed a hole, C, and a corresponding hole, C′, is formed in the section B′. A whistle, O, of tin or other suitable material, is firmly secured within the ball-section B over the hole C in such a position that air passing rapidly in and out of the said hole C will pass through said whistle O and cause it to give a musical sound. A concavo-convex diaphragm, D, of rubber or other elastic substance, is secured within the ball with its convex side toward and near the whistle O by the engagement of its edges between the edges of the ball-sections B B′; or the said diaphragm D may be secured in place by being cemented, for instance, to the concave sides of the ball-section B′. A cord, F, three feet long, or thereabout, has one end secured, as shown at *d*, to the center of the diaphragm D, and extending out through the hole C′ has a ring or loop, I, fixed or formed on its outer end.

A thimble, P, is preferably inserted in the hole C′ to preserve the walls of the latter from the wear of the cord F; but this thimble may be dispensed with without affecting my invention. A short piece, G, of elastic string is attached by each end to the cord F at a short distance from the ball A, and when in its normal condition draws said cord F up, so as to form a loop or bight, H, therein, as shown. The operator, putting a finger through the ring or loop I and taking the ball A in the hand, will then throw the ball from the hand with the effect of stretching out the elastic G and causing the loop H to straighten out, so that the cord F will become tight and draw the diaphragm D upward to the dotted lines *a*, by reason of which a partial vacuum will be created between the diaphragm D and whistle O, and air will consequently be drawn in violently through the said whistle O, causing the latter to sound. The ball, having reached the extreme point from the hand of the operator, is returned thereto by the action of the elastic diaphragm D and elastic string G, and at the same time the said diaphragm, in resuming its normal position, forces the air that has been drawn in through the whistle O out again through the latter, thereby causing it to give a musical sound.

In lieu of the whistle O, a reed may be fixed across the hole C, and be made to give musical sounds by the passage of air in and out of said hole.

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

1. An improved musical toy, constructed substantially as herein shown and described, consisting of a perforated hollow ball, A, elastic diaphragm D, whistle O, cord F, and elastic G, all arranged and operated as set forth.

2. In a hollow perforated return-ball, the combination, with the fixed elastic diaphragm D, of the cord F and loop forming elastic G, substantially as herein shown and described, and for the purpose set forth.

The above are the specifications of my invention, to which I have made oath, and to which I hereby subscribe my name this 7th day of February, A D. 1882.

CHARLES E. BALDWIN. [L. S.]

Witnesses:

CHAS. W. VAN DOREN,

PHILIP BARNARD.