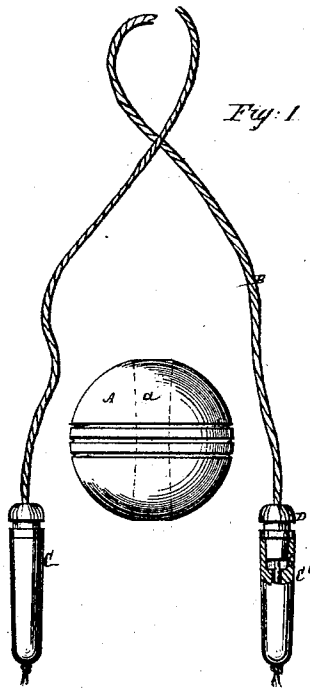


*G. Hartz,*

*Toy Ball.*

*No. 109204.*

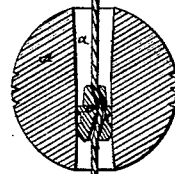
*Patented Nov. 15, 1870.*



*Fig. 1.*



*Fig. 2.*



*Witnesses:*  
*Fred. Haymer*  
*And Tusch*

*George Hartz*

# United States Patent Office.

GEORGE HARTZ OF NEW YORK, N. Y.

Letters Patent No. 109,204, dated November 15, 1870; antedated November 3, 1870.

## IMPROVEMENT IN TOY-BALLS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, GEORGE HARTZ, of the city, county, and State of New York, have invented a new and useful Improvement on the Toy known as the "Obedient Ball," of which the following is a full, clear, and exact description, reference being had to the accompanying drawing forming part of this specification, and in which—

Figure 1 represents a view of the ball detached; also, showing the string, operating-button, and handles of the toy.

Figure 2 is a sectional view, representing the several parts in working position.

Similar letters of reference indicate corresponding parts.

The obedient-ball toy consists of a ball through which a string is loosely threaded, and which is made to have the magical effect of remaining at any desired point on the string when the latter is held in a position that naturally favors the descent of the ball.

The simplest and best-known form of such toy merely embraces a crooked hole in the ball for the string to pass through, so that, by pulling on or tightening the string, the ball is restrained from moving; and, on slightly slackening the string, the ball is set in motion by its gravity, the upper end of the string usually being held in one hand, while the other end is held by the foot on the floor.

Under such form of construction, the hole through the ball is necessarily but a little larger than the thickness of the string, which not only makes the threading of the ball by the string a slow or tedious one, but the trick or secret of the toy's action is almost transparent. To render it less so, or to add to the magical effect of the toy, the ball has been made with a much larger hole through it than required for the mere passage of the string, and said hole not necessarily made crooked, but a button having a crooked hole through it has been slipped over the string, and the same been made to lock or wedge itself in the hole through the ball. The use of such button, however, has required such great dexterity to introduce it within the ball, without being discovered, as to make it a matter of considerable care and practice in order to become expert in the use of the toy.

My invention obviates this difficulty, and consists, for the purpose, in a certain combination, with the ball having a taper-shaped hole in it, of a loose button and socketed construction of one of the handles at the end of the string, whereby the trick may be easily learnt and kept up with but little fear of detection.

In the accompanying drawing—

A represents the ball, having a large straight hole, *a*, either of a single or double and reverse conical form, made diametrically through it, preferably, however, of a double or reversed conical shape, to allow of the passage of the ball from either of its ends onto the string;

B is the string; and

C C', the handles, applied to the opposite ends thereof, C being the lower handle, which may be held by the foot on the ground, while C' is the upper handle, which, as well as the string, is passed through the ball, and afterward held in the hand of the operator, to regulate, by slackening or tightening of the string, the descent or stoppage of the ball.

To this end, a button, D, having a crooked hole through it, is used, the string being threaded through said button, and the latter of such a shape as to wedge itself in the conical-shaped hole *a* of the ball.

Furthermore, said button is made to constitute in appearance the inner end proper of the handle C', and caused to loosely fit a socket, *b*, therein, so that, being entered within said socket before threading the ball, its character as a loose button is not perceived, but both handles look alike, and the deception may be kept up by similarly cutting, or otherwise forming and marking or coloring, the inner end of the handle C and button D.

On passing the handle C' and string B, however, through the hole *a* in the ball, (which should be previously exposed to show that its hole is clear and too large for the string to have any binding effect, the button D is automatically, as it were, left in the hole through the ball, and caused to wedge itself therein, and the magical effect or action of the toy thus allowed, by means of the crooked hole in the button, to be established and kept up.

The introduction of the button within the ball, requiring no particular dexterity, gives to the toy a value which it has not heretofore possessed.

What is here claimed, and desired to be secured by Letters Patent, is—

The combination, with the tapering hole *a* in the ball, of the button D, constructed to fit, in a readily detachable manner, the end of one of the handles C', so as to form in appearance a component part of the same, substantially as specified.

GEORGE HARTZ.

Witnesses:

FRED. HAYNES,  
FERD. TUSCH.