

*J. H. Harrison,*

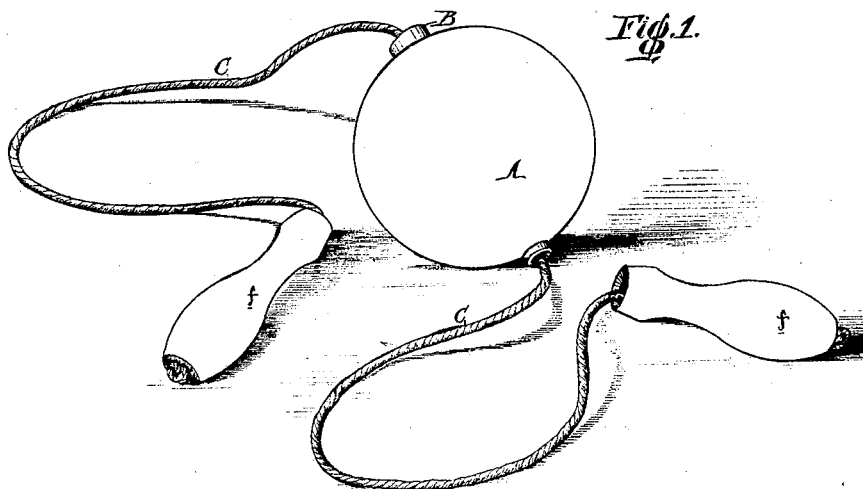
*Toy.*

*No. 113654.*

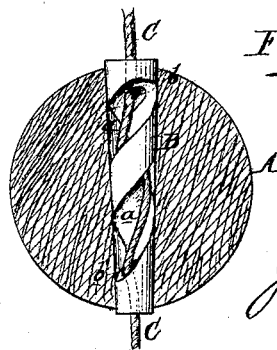
*Patented Apr. 11. 1871.*



*Fig. 3.*



*Fig. 1.*



*Fig. 2.*

*Witnesses,*

*Jno. B. Harding.*  
*Harry Smith*

*J. H. Harrison*  
*by his atty*  
*Harrison & Son*

# United States Patent Office.

JOHN HAMILTON HARBISON, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 113,654, dated April 11, 1871.

## IMPROVEMENT IN TOYS.

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

I, JOHN HAMILTON HARBISON, of Philadelphia, county of Philadelphia, State of Pennsylvania, have invented a new Toy, of which the following is a specification.

### *Nature and Object of the Invention.*

My invention consists of a new toy, the construction and operation of which is too fully described hereafter to need preliminary description.

### *Description of the Accompanying Drawing.*

Figure 1 is a perspective view of the toy; Figure 2, a sectional view of the same; and Figure 3, a perspective view drawn to a reduced scale, and showing the method of using the toy.

### *General Description.*

The toy, as illustrated in the drawing, consists of a spherical ball, A, of wood, painted in different colors, or otherwise ornamented, and having a hole bored entirely through it, into which is driven a plug, B, the latter having cut upon it a spiral groove, *a*, terminating at a short distance from the opposite ends of the plug, and having also central holes, *b* and *b'*, through which and around the said spiral groove is passed a cord, C, furnished at its opposite ends with suitable handles *f*.

The plug may be perfectly straight, and be glued or cemented into the opening in the ball A; but I prefer to make it of a tapering shape, and to drive it into a correspondingly-shaped opening in the ball, as shown in the drawing.

In using the toy the cord is held somewhat loosely in a vertical or nearly vertical position, with one handle in each hand, as shown in fig. 3, when the ball, instead of sliding directly down the cord, as with other toys of

this class, will descend with a revolving or twirling motion, owing to the screw-like action of the spiral groove *a* upon the cord.

This twirling motion will increase in rapidity as the ball descends and acquires momentum; but it can be instantly stopped at any time by tightening the cord and thus preventing the passage of the same through the spiral groove.

I have found that the toy operates most satisfactorily when the cord is passed through central openings *b* and *b'* in the plug, as well as around the spiral groove; but the latter might in some cases be continued throughout the entire length of the plug, and the central openings be dispensed with.

The plug might also in some cases be dispensed with, and a spiral hole be formed directly in the ball itself.

The toy might also be modified by substituting a wheel or disk, or a number of radiating arms, for the spherical ball; but I prefer to employ the latter.

Toys of this class have heretofore been constructed so that, by tightening the cord, the sliding motion of the ball thereon is arrested; I therefore make no claim to this feature; but

I claim—

A toy, consisting of a ball or its equivalent, and a cord which passes through a spiral opening in the ball, so that a rotating motion will be imparted to the latter as it slides on the cord.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN HAMILTON HARBISON.

Witnesses:

WILLIAM G. FRALEY,  
ANDREW L. EISENHUT.