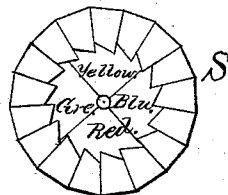
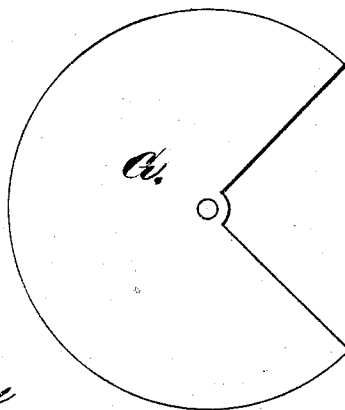
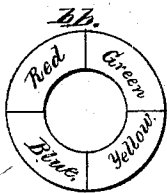
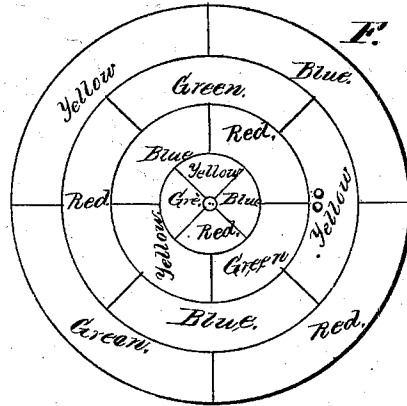
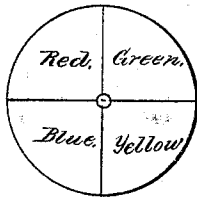
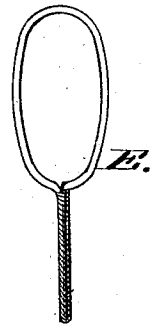
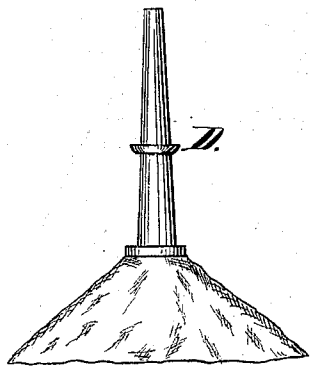
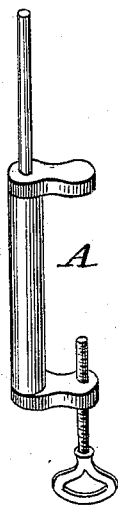
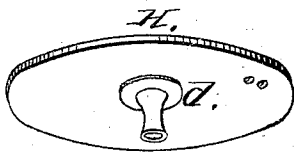


G. R. LILLIBRIDGE.

Spinning-Toys.

No. 150,869.

Patented May 12, 1874.



Witnesses.

A. Frank Shaw  
John W. Managau

Inventor.

Gardner R. Lillibridge

# UNITED STATES PATENT OFFICE

GARDNER R. LILLIBRIDGE, OF NEW YORK, N. Y.

## IMPROVEMENT IN SPINNING-TOYS.

Specification forming part of Letters Patent No. **150,869**, dated May 12, 1874; application filed May 20, 1873.

*To all whom it may concern:*

Be it known that I, GARDNER R. LILLIBRIDGE, of the city of New York, N. Y., have invented certain Improvements in Toy, entitled Magic Circles, Dissolving Rings, and Flexible Phantoms, of which the following is a specification:

The first part of my invention consists of a standard, A, to be fastened to a table or any other horizontal shelf or projection by means of a thumb-screw, upon which standard is a wire shaft or axle, three inches in length, more or less, upon which are made to spin the several appliances hereinafter described. I use as a base for spinning a tablet, H, made of thin metallic plate or binders' board, which has affixed, by means of rivets, glue, or otherwise, a hub, *d*, made of metal or hard wood, under the center of H, upon which the cord for spinning the tablet operates. Upon the face of this tablet are four circular divisions, of equal widths, each division being quartered, and each quarter painted or printed alternately with the primitive colors—blue, red, green, and yellow. (See drawing, letter F.)

The second part of my invention consists of a cylindrical shaft, D, of about four inches in length, made preferably from any light seasoned wood, and turned from three-eighths of an inch or so diameter at the base to two-eighths of an inch, more or less, diameter at the top. A sub-base, of about three-fourths of an inch diameter, and one-eighth of an inch thickness is left in turning the shaft, for the purpose of gluing to it a piece of circular muslin, five inches diameter, centrally upon the shaft. This shaft upon being placed upon the axle of standard A over the tablet H, a suction takes place when spinning that causes the shaft to spin as rapidly as the tablet. A variety of covered wires are made to be deposited successively in the tubular shaft D. One of these wires, E, I make of small annealed wire, covered with thread, from thirteen to fifteen inches long, bending the same in such a manner that the two ends are brought evenly together, and twisting them for the depth of an inch, more or less, and securing the doubled ends from unraveling by dipping the same in melted sealing-wax, or by pasting a piece of paper over the same. When this prepared wire is placed

in the shaft D, it may be bent into the most grotesque shapes imaginable, and when spinning the outlines will assume the most elaborate representations of vases, urns, globes, decanters, goblets, épergnes, basins, fountains, &c. These I designate "flexible phantoms."

F is a paper tablet, of about nine inches in diameter, it being a duplicate of tablet H, and it is so folded that it can be placed in a box of, say, six inches square. A couple of holes are punched in this tablet about two inches from its center, and corresponding with holes punched in tablet H. These are for the purpose of securing one to the other by means of a bit of small twine or other material put through the holes, and tied or secured beneath the under tablet H. The black three-fourths disk G is likewise folded, for portability, corresponding with tablet F. *a a* and *b b* are two circlelets, made of thick paper or thin card, and each quarter painted or printed with the aforementioned primitive colors. The circlelet *a a* is about two inches in diameter, and *b b* is, say, four inches in diameter, and the former is punched from the center of the card, making *b b*; then the smaller circlelet, *a a*, has an inch diameter punched from its center. These circlelets are to be then dipped in a preparation of gum shellac dissolved in alcohol, and dried. This preparation forms a bond upon the inner edges of the circlelets, and prevents their wearing in coming in contact with the axle when spinning. These circlelets are to be placed between tablet F and disk G, the smaller, *b b*, on top of the larger *a a*.

When spinning, the variety of positions these circlelets assume, and the mixing of their colors with those upon the face of the tablet, cause thousands of brilliant changes, forming what I term "magic circles and dissolving rings." Next, take the two circlelets from under disk G, and place them on top of the same, taking the disk belonging to tablet H, and place it above the whole; now spin again, and the most wonderful changes will appear in flashes of great beauty.

My invention further consists in having a duplicate, about six inches, the diameter of tablet F or H, printed or pasted on ordinary cap-paper. This is for what I call the "magic saucer" S. A bit of card, half-inch square, is

glued or pasted on the center, and a hole punched to admit the axle. In preparing this for the transformation, I use a metallic plate, tin or brass, of circular form, four inches diameter, with a corresponding hole in its center, as a pattern. Drive a bit of wire so as to project a half an inch above the work-table, upon which place the paper S, and again upon this the pattern, and proceed to fold and lap inward, the pattern being the limit. The whole circle should, when folded, give about twelve or thirteen folds. Remove the pattern, and press down the folds for use. When placed on tablet H, spin gently at first; then by a sudden jerk of the cord the folds fly open, and reveal a neat representation of a saucer. Next, by placing the three-fourths disk G of tablet H on the axle above the saucer S, and again spinning, a great variety of colored saucers appear; and again, by placing circlet *a a* or *b b* in the saucer under the disk, and spinning,

the results will be astonishing. The saucer is easily refolded for future uses.

What I claim as my invention is—

1. In combination with the clamp-standard A, provided with the set-screw and upright stock, the disk H having the hub *d* for spinning thereon, substantially as described.

2. In combination with the standard and disk, as described, the cylindrical shaft D, as set forth.

3. In combination with the disk H and standard A, the saucer S, substantially as described.

4. The annealed and covered wire E, looped as shown, and having the two ends fastened together, substantially as and for the purpose described.

GARDNER R. LILLIBRIDGE.

Witnesses:

A. FRANK SHAW,  
JOHN W. MANARQUE.