

(No Model.)

R. PILKINGTON.
OPTICAL TOY.

No. 567,863.

Patented Sept. 15, 1896.

FIG. 1.

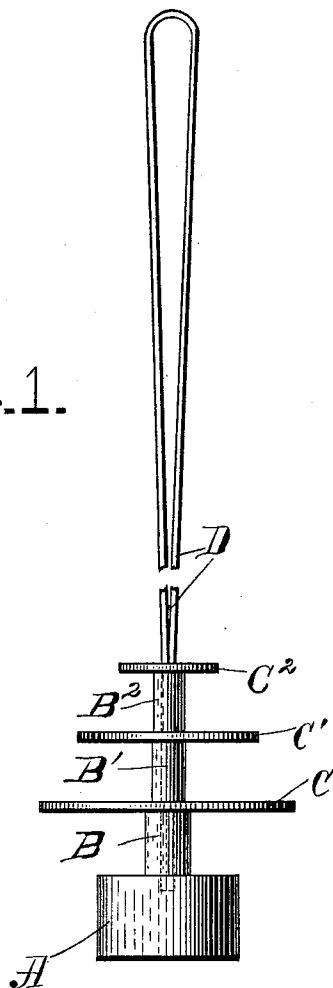
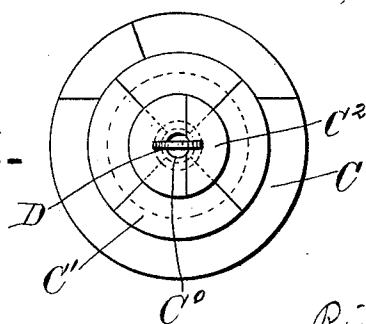


FIG. 2.



Witnesses

John H. Holt,
D. H. Blakelock.

Inventor
Richard Pilkington,
by Whitman & Wilkinson
Attorneys

UNITED STATES PATENT OFFICE.

RICHARD PILKINGTON, OF LONDON, ENGLAND.

OPTICAL TOY.

SPECIFICATION forming part of Letters Patent No. 567,863, dated September 15, 1896.

Application filed September 5, 1895. Serial No. 561,563. (No model.)

To all whom it may concern:

Be it known that I, RICHARD PILKINGTON, clerk in Holy Orders, a subject of the Queen of Great Britain, residing at 1 Ham Terrace, West Ham Lane, West Ham, London, county of Essex, England, have invented a new or Improved Optical Toy, of which the following is a specification.

This invention relates to a new or improved optical toy, which consists of a weight, a string, or the like piece or pieces of elastic or equivalent, suspended in any suitable manner and to the depending end of which is attached the said weight and a colored device or devices (advantageously varicolored) attached to or mounted on the said elastic or on the said weight (advantageously between the latter and the point of suspension of the elastic) in such manner that when the said weight is held suspended in the air (for instance, by holding the elastic in the hand) and then spun round or revolved by the operator until said elastic is wound up or twisted sufficiently thereupon the reaction of said elastic or its tendency to untwist will cause the weight to very quickly revolve, and the impetus thus imparted to said weight will consequently rewind or retwist the said elastic and so on for a considerable period of time. Meantime the gyration thus imparted to the aforesaid colored device or devices will (by reason of the varying speeds and alternating direction of revolution, &c.) thus produce very striking as well as very pleasing and ever-varying optical effects, thus affording amusement and pleasure by means of this novel toy.

To more fully describe my invention, reference is had to the accompanying drawings, in which—

Figure 1 represents my improved optical toy in side elevation, and Fig. 2 represents a plane view of the same.

Similar letters refer to similar parts throughout both the views.

A is a weight, advantageously of lead or

other suitable material. This weight is suspended on the end of an elastic cord D, which may be of india-rubber or other suitable elastic or other material.

C, C', and C² are three disks provided with a central aperture C⁰ and threaded on the cord D. These disks C, C', and C² may be made of any thin light material, as paper, cardboard, papier-mâché, or very thin sheet metal. The disks are multicolored on their upper faces, either all differing from each other or all alike. Interposed between each disk and between the disk C and the weight A are the short vertical tubes B, B', and B², which act to keep the three disks apart.

The optical effect is produced in this way: The cord D being held in one hand, the weight A is twisted, thus causing the two members of the cord D to twist around each other. The weight A is then set free, which allows the elastic cord D to quickly unwind, but the inertia of the weight winds the cord up again, when the weight starts back in the opposite direction, thus keeping up this winding and unwinding for some time. As the cord D winds up and unwinds the disks C, C', and C² all revolve rapidly, the colors on their upper faces combining and blending as the speed of the disks change, which presents at once a beautiful and attractive optical effect.

What I claim, and desire to secure by Letters Patent of the United States, is—

In an optical toy of the character described, the combination with the circular weight A, and the elastic cord D attached to the center of said weight; of a plurality of disks of varying diameters and variously colored upon their upper faces, threaded upon said cord with the smaller disks uppermost; and a short sleeve interposed between each pair of said disks, substantially as described.

RICHARD PILKINGTON.

Witnesses:

HENRY BIRKBECK,
GEORGE W. KEY.