

E. J. PEARCE.
MECHANICAL TOY.
APPLICATION FILED DEC. 23, 1908.

943,096.

Patented Dec. 14, 1909.

Fig. 1

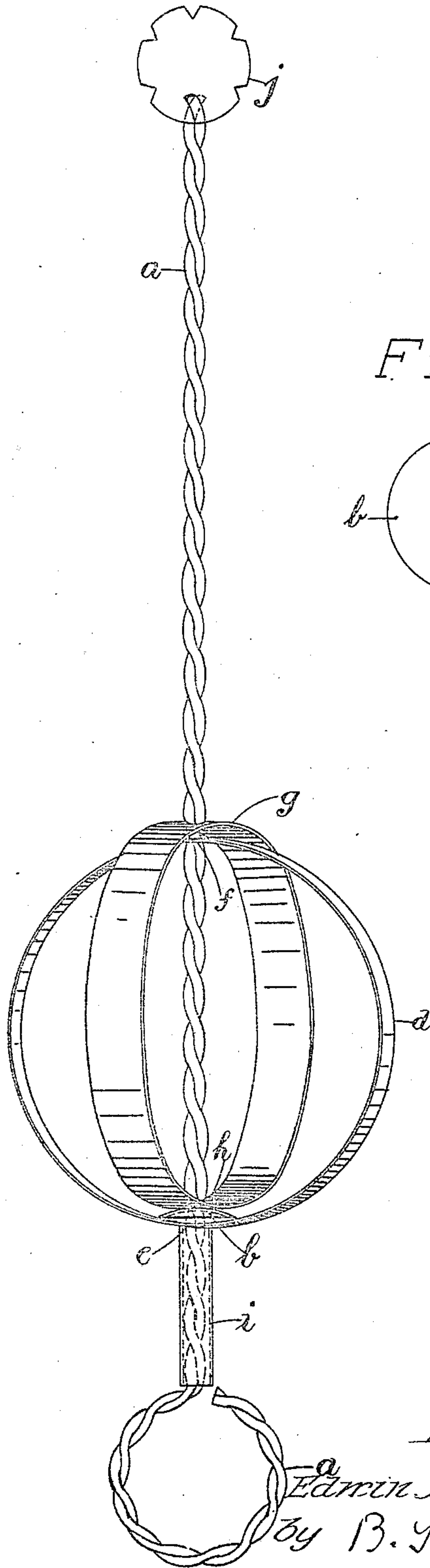
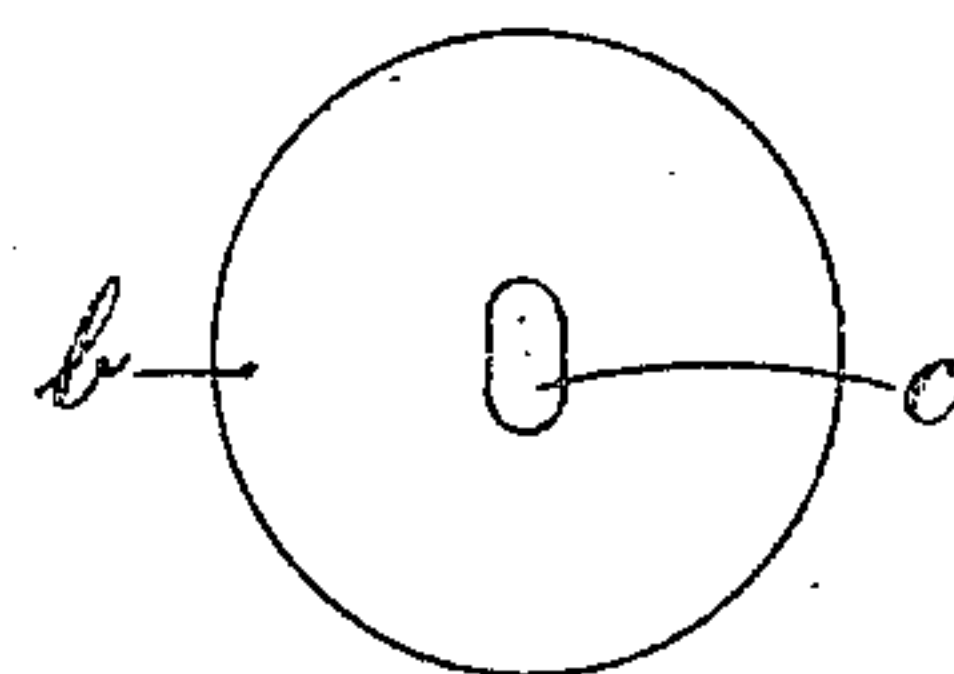


Fig. 2.



Witnesses:-
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UNITED STATES PATENT OFFICE.

EDWIN JAMES PEARCE, OF NEW BRIGHTON, ENGLAND.

MECHANICAL TOY.

943,096.

Specification of Letters Patent.

Patented Dec. 14, 1909.

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To all whom it may concern:

Be it known that I, EDWIN JAMES PEARCE, a subject of the King of Great Britain, of 55 Victoria road, New Brighton, in the county of Cheshire, England, photographer, have invented a new or Improved Mechanical Toy, of which the following is a specification.

My invention relates to a new or improved mechanical toy which is simple in construction, cheap to manufacture and extremely effective and amusing while in use.

The accompanying drawing is in illustration of my invention.

15 In order to carry out my invention I take a length of sufficiently stout steel wire and at the center of its length I bend it so that the two sides lie parallel with each other with the exception of a loop or ring which is formed at the junction of the bend. The 20 two parallel wires I then carefully twist upon themselves to form a continuous and even, somewhat elongated, helical thread, as clearly shown at *a* in Figure 1 of the drawing. 25 Upon this thread I fit a washer *b* (shown on a larger scale in Fig. 2) the opening *c* through which is of a corresponding shape to the double twisted wire in end section, but fitting freely thereon so that when the 30 wire is held in a vertical position the washer will fall by its own weight to the lower end, revolving in its downward course a corresponding number of times to the number of twists in the wire. A ring or loop of thin 35 flat metal *d* is also fitted upon the wire *a*, the latter being threaded or passed through two holes at *e*, *f* in the circumference of the ring and the revolving washer *b* being situated upon the wire upon the inner circumference of the ring. A second ring *g* is also 40 threaded upon the wire in a similar manner but arranged partly within the first ring and resting upon the revolving washer at *h*. Beneath the rings and washer arranged as 45 described I fit upon the twisted wire a loose sleeve or collar *i* which can easily slide up and down the wire when desired. The loose sleeve and the rings and revolving washer being arranged upon the wire in the manner 50 described, the upper end of the wire is then bent over to form a stop and may have attached to it one or more bells or other devices, as indicated at *j*.

It will be understood that in order to arrange the rings upon the wire in the way de-

scribed their ends must be joined either before or after they have been fitted upon the wire and this may be effected by soldering or by other convenient means.

By holding the wire with the rings in a 60 vertical position and sharply pushing the loose sleeve upward the washer is caused to revolve and by its friction against the inner side of the lower ring and the outer side of the upper ring a rapid revolution is im- 65 parted to the two rings until the upper end of the wire is reached when they fall by their own weight still continuing to revolve in the same direction until they reach the lower end of the wire. The washer on the 70 contrary returns to its normal position by revolving in the reverse direction on its downward course but having no perceptible effect upon the revolving rings.

By quickly raising and lowering the slid- 75 ing sleeve a rapid and continuous revolution is imparted to the rings, the latter taking the appearance of two distinct globes or spheres and a very beautiful effect is produced. 80

The outer sides of the rings may be ornamented by coloring in any desired way, the effect when the rings are revolving being thus considerably enhanced, and the rings themselves may be made somewhat pear 85 shaped or otherwise.

The details of my novel mechanical toy and the materials of which it is composed may obviously be varied to suit varying circumstances such as the price at which the 90 article is to be sold and the like. For instance, it is obvious that two or more sets of rings may be similarly arranged upon the same wire.

What I claim as my invention and desire 95 to secure by Letters Patent is:—

1. A mechanical toy comprising in combination a helically twisted wire, inter-linked rings slidably and rotatably mounted thereon, a washer between said rings for ro- 100 tating the same upon the thread formed on the wire and a sleeve for imparting longitudinal motion to said washer.

2. A mechanical toy comprising in combination a helically twisted wire, inter- 105 linked rings slidably and rotatably mounted thereon, a washer in frictional engagement with said rings for rotating the rings on the thread formed by the twisted wire, said rings being adapted to rotate more rapidly 110

than said washer, and means for imparting longitudinal motion to said washer and said rings.

3. A mechanical toy comprising in combination, a threaded stem, rings rotatable and loosely mounted thereon, a washer frictionally engaging said rings and having threaded engagement with said stem for revolving said rings, and a member slidably

mounted on said stem for moving the rings 10 and washer along said stem to effect rotation thereof.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

EDWIN JAMES PEARCE

Witnesses:

D. K. BOYLE,

ALFRED G. BRATTON.