H. J. COLE.

MECHANICAL TOY.

APPLICATION FILED OCT. 4, 1917.

1,279,271.

Patented Sept. 17, 1918.

Fig. 1.

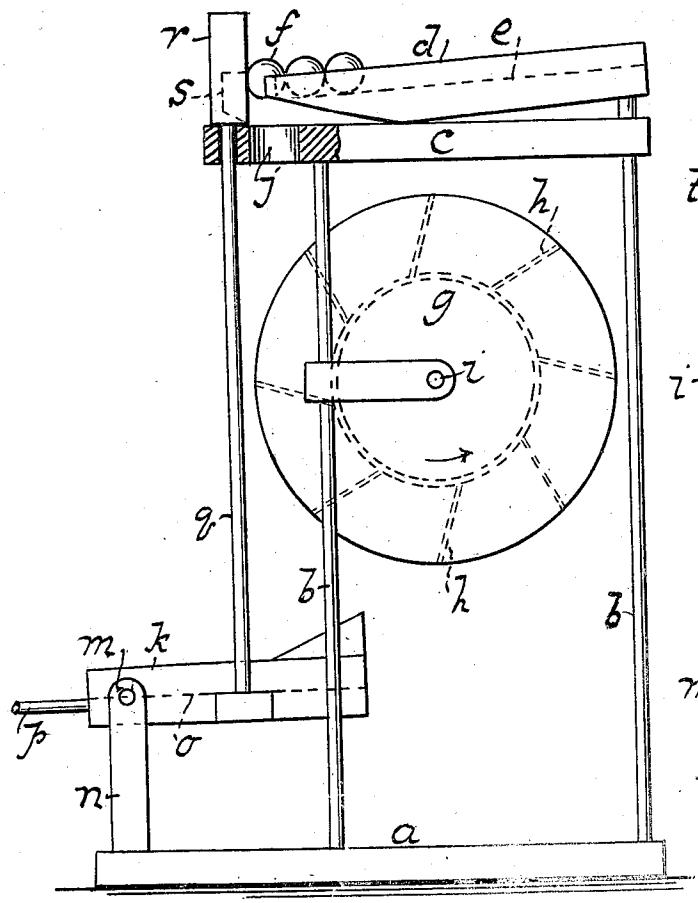


Fig. 2.

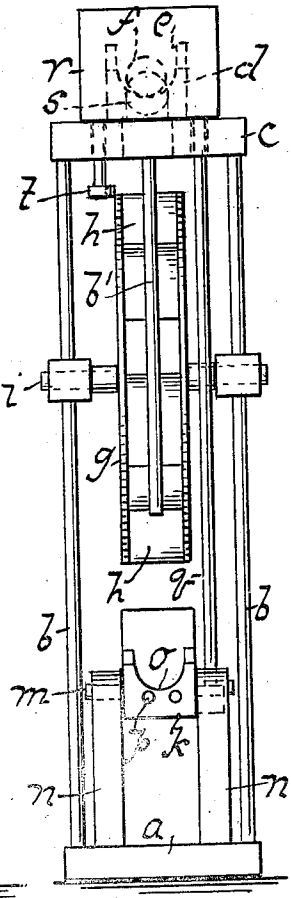
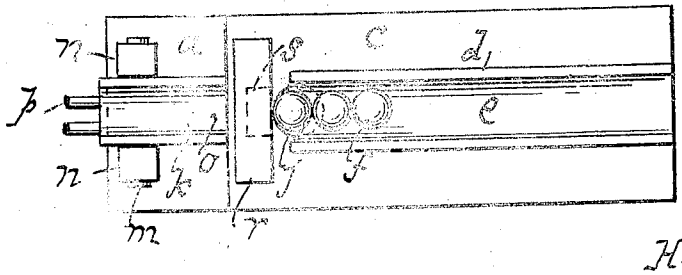


Fig. 3.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

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MECHANICAL TOY.

1,279,271. Specification of Letters Patent. Patented Sept. 17, 1918.

Application filed October 4, 1917. Serial No. 194,720.

To all whom it may concern:

Be it known that I, HARRY J. COLE, a citizen of the United States, residing at Bennington, county of Bennington, and State of Vermont, have invented new and useful Improvements in Mechanical Toys, of which the following is a specification.

This invention relates to a mechanical toy in which a weighed article is intermittently dropped from a chute to a bucket wheel, and thence on to a lever for controlling the movement of the articles.

The object of the invention is to provide the lever with means operated by the weight of the article for preventing more than one of the articles from dropping off the chute while the device is in action.

The novel features of the invention are more fully described in the following specification and claims and illustrated in the accompanying drawing in which:—

Figure 1 represents a side elevation of a device embodying this invention.

Fig. 2 is a front view of the same.

Fig. 3 is a plan view of the same.

In this drawing is shown a frame comprehending a base *a* having posts *b* and a top *c* secured to the posts. On the top *c* is fastened an inclined chute *d* having a channel gutter *e* for guiding a number of spheres or marbles *f* placed in a row along the gutter.

A wheel *g* with a number of buckets or pockets *h* is pivoted at *i* to two of the posts. The ball is prevented from falling out of a pocket until the wheel rotates a certain distance by means of a rod *b'* projecting from the top of the frame. The ball when rolling off the end of the chute will pass through a hole *j* located in the top of the frame.

A lever *k* is swingingly pivoted at *m* to uprights *n* extending from the base. The lever is provided with a gutter *o* and a forwardly projecting track *p* to guide the balls. Behind the fulcrum of the lever is fixed a rod *q* which extends upwardly through a hole in the top *c*, and a gate *r* is fastened to its end. A cavity *s* is arranged in the face of the gate to at times coact or register with the ball. A stop *t* will limit the upward movement of the gate.

When it is desired to operate the device, the gate *r* is lifted and the first ball rolls into the cavity, the weight of the ball will then force the gate downward. The ball thence drops through the hole *j* into one of the buckets *h*, thus rotating the wheel in the direction of the arrow and when the bucket reaches a certain position the ball gravitates downward on to the lever *k* and rolls off the forward end of the tracks. The weight of the ball will swing the rear portion of the lever upward and bring the cavity into register with the foremost ball which again repeats the action noted above. The operation is automatic until all the balls have rolled off the chute.

I claim:—

1. A mechanical toy comprising a frame, a chute for guiding a number of weighted articles secured to the frame, a wheel in the path of the articles, means extending from the frame for preventing the article from falling out of the wheel until it oscillates a predetermined distance, and a lever actuated by the article for interrupting the movement of the articles from the chute.

2. A mechanical toy comprising a frame, a chute for guiding a number of weighted articles arranged on the frame, a wheel in the path of the articles, means extending from the frame for preventing the article from falling out of the wheel until it oscillates a predetermined distance, a lever swingingly connected to the frame for coaction with the article, and a gate actuated by the lever for interrupting the movement of the article.

3. A mechanical toy comprising a frame, a chute for guiding a number of spherical articles secured to the upper part of the frame, a bucket wheel in the path of the articles, means extending from the frame for preventing the article from falling out of the wheel until it oscillates a predetermined distance, a lever swingingly connected to the frame for coaction with the article, and a gate actuated by the lever for interrupting the movement of the article.

4. A mechanical toy comprising a frame, an inclined chute for guiding a number of spherical articles secured to the upper part

of the frame, a rotary bucket wheel in the path of the articles, a lever swingingly mounted on the frame below the wheel for coaction with the article, a gate connected to the lever, said gate having a cavity to intermittently feed one of the spheres to the wheel.

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

HARRY J. COLE.

Witnesses:
C. M. GRAVES,
NELLIE I. HOGAN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."