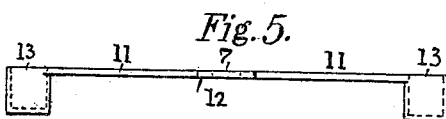
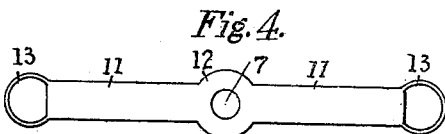
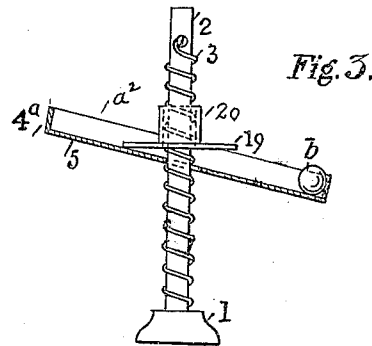
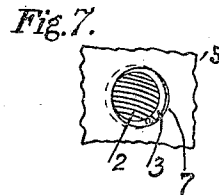
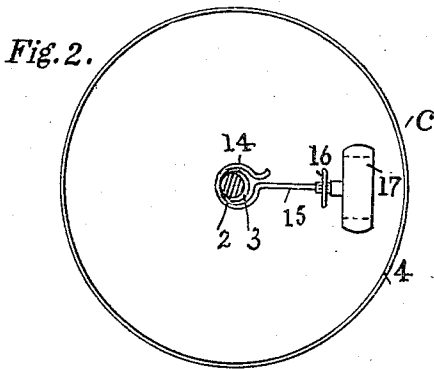
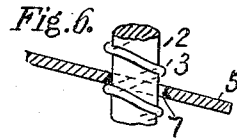
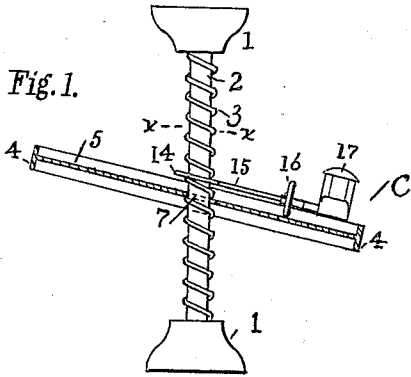


W. I. TOWNE.
MECHANICAL TOY.

APPLICATION FILED JAN. 28, 1909.

931,901.

Patented Aug. 24, 1909.



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MECHANICAL TOY.

931,901.

Specification of Letters Patent. Patented Aug. 24, 1909.

Application filed January 28, 1909. Serial No. 474,755.

To all whom it may concern:

Be it known that I, WALTER I. TOWNE, residing at West Medford, in the county of Middlesex and State of Massachusetts, have
5 invented certain Improvements in Mechanical Toys, of which the following is a specification.

This invention relates to a mechanical toy, and consists essentially in a vertical spiral or
10 guide, and a device termed a wabblor adapted to descend the guide by gravity and at the same time rotate around it in a bowing or wabbling manner.

The invention also consists of several modifications, all of which I will now proceed to describe and point out specifically in the appended claims.

In the drawings which form a part of this specification and illustrate the invention,
20 Figure 1 is a side view partly in section; Fig. 2 is a plan view of the above and section on line $x-x$ of Fig. 1; Fig. 3 is an illustration of an additional sectional detail to the main feature; Figs. 4 and 5 are respectively a plan
25 and a side view of a modification; and Figs. 6 and 7 are side and plan views of an enlarged detail.

In the drawings, 1 and 1 are bases or supports to which are connected a rod 2, bearing
30 upon its surface a spiral of wire secured to each end thereof by soldering or otherwise, or the spiral may be a thread cut upon the rod. Or the rod may be omitted and a wire spiral used, as in Fig. 3, and secured at each
35 end by screw eyes 8, 8, to a stable support.

A device termed a "wabblor" a , see Figs. 1 and 2, made of a disk 5 with a band 4 centrally around its periphery, and having a central hole 7 is balanced upon the rod 2,
40 and naturally assumes an inclined position, as the disk slides until the edge of the hole 7 rests against the side of the rod. The hole is made a little smaller than the diameter of the spiral, so that the wabblor will not fall
45 off the same, as shown in Figs. 2, 7 and 8. The wabblor is in an inclined position relative to the spiral with the edge of the hole 7 bearing against the same and rotates around the spiral in its tilted position as it descends
50 by gravity. The best results are secured when the hole 7 is less in diameter than the diameter of the spiral an amount equal to the depth or the diameter of the spiral, and also when the edge of hole is rounded, and
55 the outer periphery of the spiral also rounded.

Figs. 5 and 6 represent a plan and side view of a modification in which 11, 11 are radial arms extending from a central disk 12 in which is a hole 7, upon the ends of the arms are seats or baskets, as the case may
60 be, in which toy figures may be placed. This device is placed upon the spiral, balanced upon the hole 7, and serves as a toy seesaw, having an up and down motion as well as a rotating one.

In Fig. 1, c is a following device consisting of a wire loop 14 adapted to be sprung about the rod 2 and extending radially outward as a rod or spindle 15 having a wheel 16 in a
65 suitable bearing, on the disk 5 and provided on its end with a representation of a car or other familiar object. Assuming that the device c is at rest, it is easily set in motion by depressing or turning the same by the hand, whereupon the edge of the hole 7 strikes the
70 face of the rod as it sinks on the spiral 3 and it bows or wabbles, at the same time rotating and changing its plane to the observer, and so continues until it reaches the bottom, when the toy may be turned, the following
80 device readjusted and set down upon its opposite support 1. While the "wabblor" is moving the device c is also in motion, as will be easily understood, and travels upon the disk 5. This device c , while it adds to the
85 attraction of the whole toy, also serves as a regulator of the speed of the disk, which speed is also affected by the size and weight of the wabblor. The same regulating effect is produced in Fig. 4 by the ball b in the
90 wabblor a^2 ; and by placing in the same receptacle balls of different size and weight, the wabblor may be made to move faster or slower.

In Fig. 3 is a modification of means for
95 regulating the speed of the wabblor consisting of a tube 20 adapted to fit loosely over the spiral provided with an integral disk 19 whose periphery is adapted to touch the surface of the disk 5; by placing over the spiral,
100 devices with disks 19 of greater or less diameter the speed of the wabblor a may be made faster or slower.

It will be seen that there are many adaptations and variations of construction of the
105 invention which may be made without departing from the principle of the same.

I claim as my invention and desire to secure by Letters Patent—

1. In a mechanical toy, a rod a spiral on 110

the rod a traveling device adapted to descend the rod by gravity, with a speed controller upon the rod and said device.

2. In a mechanical toy, a rod a spiral on
5 the rod, a traveling device adapted to descend the rod by gravity consisting of a disk, with a speed controller adapted to rest upon the disk.

3. In a mechanical toy, a rod a spiral on
10 the rod, a traveling device on the rod adapted to descend by gravity consisting of a disk having a rim, with a speed controller about the rod and resting on the disk.

4. In a mechanical toy, a rod provided
15 with a spiral, a traveling device on the rod adapted to descend by gravity, with a following device supported by the rod and traveling device.

5. In a mechanical toy, a rod provided
20 with a spiral, a traveling device on the rod adapted to descend by gravity, consisting of a disk having a rim, with a following device supported by said rod and disk.

6. In a mechanical toy, an upright rod, a
25 base for the same, a spiral upon the surface

of the rod having its outer periphery rounded, a traveling device on the rod and spiral adapted to descend by gravity, consisting of a disk having a central hole of less diameter than the diameter of the spiral and having
30 rounded edges, and a speed controller resting upon the disk, as set forth.

7. In a mechanical toy, an upright rod a spiral upon the same having its outer periphery rounded, a traveling device on the
35 rod and spiral adapted to descend by gravity consisting of a disk having a central hole of less diameter than the diameter of the spiral and having rounded edges, with a following device supported by said rod and extending
40 radially therefrom and bearing upon the disk, as set forth.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses, this 22d day of
45 January 1909.

WALTER I. TOWNE.

Witnesses:

GEO. WILLIS PIERCE,
FRANK C. LOCKWOOD.