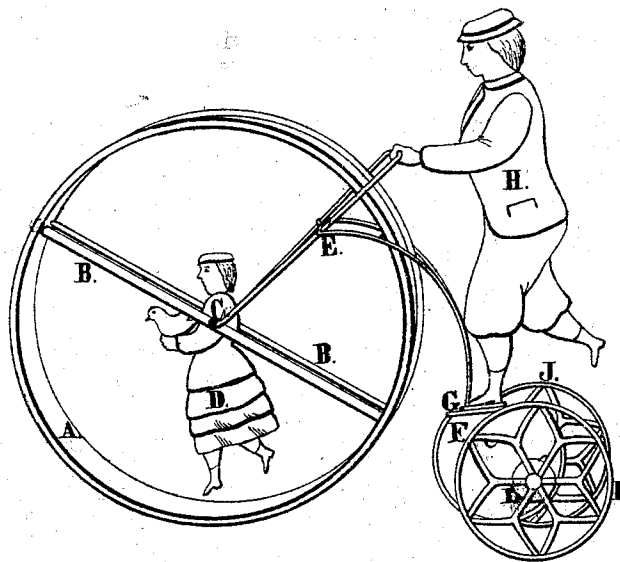


G. W. BROWN.
Automatic Toys.

No. 147,475.

Patented Feb. 17, 1874.



WITNESSES.

Saml Waters
Wm F. Brown

INVENTOR.

Geo W Brown

UNITED STATES PATENT OFFICE.

GEORGE W. BROWN, OF FORESTVILLE, CONNECTICUT.

IMPROVEMENT IN AUTOMATIC TOYS.

Specification forming part of Letters Patent No. 147,475, dated February 17, 1874; application filed October 2, 1873.

To all whom it may concern:

Be it known that I, GEORGE W. BROWN, of Forestville, in the county of Hartford and State of Connecticut, have invented certain Improvements in Toy Hoops, of which the following is a specification:

My invention relates to a hoop, constructed of wood or metal, with a bar or bars extending transversely across its diameter, through which extends a shaft or axle, upon which is suspended a figure or figures, said shaft or axle being connected by rods or bars to the propelling machinery, which is mounted upon one or more wheels in the front or rear of the hoop. If mounted in front of the hoop, the figure which is placed upon the carriage of the propelling machinery is represented as drawing the hoop, and if it is mounted in the rear of the hoop, it is represented as pushing the same. Upon the carriage of the propelling machinery is a swivel-joint attached to the rods which connect the hoop to the propelling machinery, by which means the hoop may be made to perform its journey in a straight line or in a circle. The propelling machinery consists of a coiled spring and a train of geared wheels, one of which is attached to the axle of the carrying and propelling wheels; but other propelling force may be used.

In the accompanying drawing, A is the hoop; B B, the bars running transversely across the same. C is the axle, and D is a figure suspended therefrom. E are the rods connecting the hoop with the propelling machinery. F is the case containing the propelling machinery. G is the swivel-joint. H is a figure surmounting the machinery-case. I is the driving-wheel, and is firmly attached to the axle, which forms a shaft of the propelling machinery. J is the wheel, which is loosely attached to the same shaft, and acts, together with the driv-

ing-wheel, as a carrying-wheel to the propelling machinery, and the figures attached thereto. L is a weight attached to the axle of the driving and carrying wheels to maintain the center of gravity when the toy hoop is propelled in circles, and by thus sustaining its equilibrium prevents its overturn while performing its circular journey. When the coil-spring is wound up, motion is imparted through the train of gear-wheels to the axle of the driving-wheel, which propels the toy hoop forward in a straight course if, through the swivel-joint, it is adjusted so as to form a straight line with the center of the shaft of the carrying-wheels, or in circles whose diameter will vary according to the angle of divergence therefrom.

I claim as my invention—

1. The toy hoop provided with a figure, D, in combination with the holding-figure H, mounted upon the carrying and driving wheels of the propelling mechanism J, substantially as and for the purpose described.
2. The toy hoop, with figures, as described, in combination with the swivel-joint G, connecting-rods E, and propelling machinery, substantially as set forth.
3. In combination with the toy hoop, the equilibrium-weight L, attached to the axle of the carrying and driving wheels, as and for the purpose described.
4. The toy hoop, with attached figures, connecting-rods, and swivel-joint, as described, in combination with the propelling machinery, constructed and arranged in the manner and for the purposes substantially as set forth.

GEO. W. BROWN.

Witnesses:

JASON WATERS,
WM. F. BROWNE.