

G. W. BROWN.

Improvement in Mechanical Toys.

No. 128,357.

Patented June 25, 1872.

Fig 1

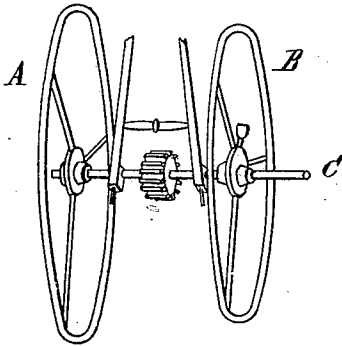


Fig 2.

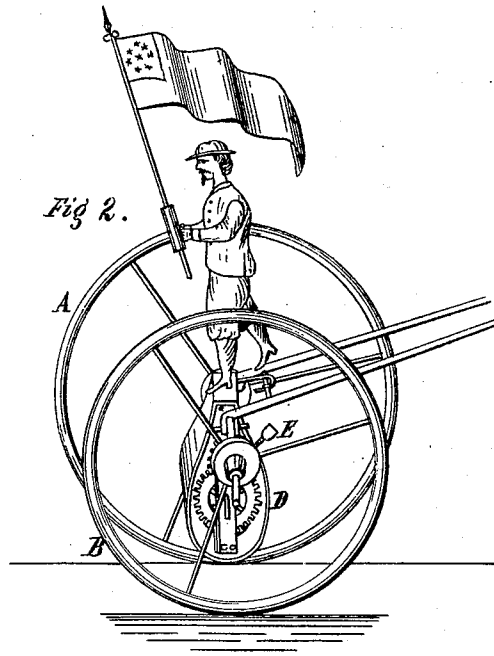
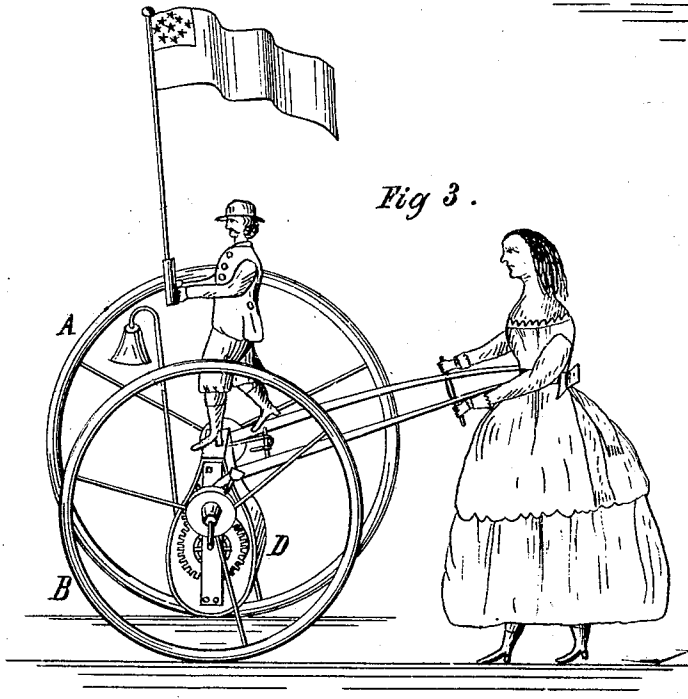


Fig 3.



Witnesses

Wm F Browne  
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# UNITED STATES PATENT OFFICE.

GEORGE W. BROWN, OF FORESTVILLE, CONNECTICUT.

## IMPROVEMENT IN MECHANICAL TOYS.

Specification forming part of Letters Patent No. 128,357, dated June 25, 1872.

Specification describing certain Improvements in Mechanical Toys, invented by GEORGE W. BROWN, of Forestville, Hartford county, and State of Connecticut.

My invention relates to a combination of carrying-wheels of different diameters attached to a shaft or axle connected to a propelling mechanical device, in such a manner that, when set in motion, the toy vehicle, whether propelled by a spring and clock-work or a miniature steam-engine, will move in circles of greater or lesser magnitude, according to the difference of the diameter of the carrying-wheels and the length of the shaft or axle upon which they are mounted, thus avoiding a collision with the walls of a room or inclosure, and causing the toy and its attachments to perform a continuous journey without interruption until the propelling-force becomes exhausted.

In the accompanying drawing, Figure 1 is a representation of the wheels and shaft or axle. Fig. 2 is a representation of the same with a propelling mechanical device attached thereto, with a child carrying a banner. Fig. 3 represents the wheels, shaft, and propelling device, with a walking-doll attached to the same.

A is the larger carrying-wheel. B is the smaller carrying-wheel. C is the shaft or axle attached to the carrying-wheels. D is the case containing the propelling machinery. E is the set-screw, by which the wheels are made adjustable upon the shaft or axle.

When the propelling-force is communicated to the machinery motion is imparted to the carrying-wheels A and B through the shaft or axle C, to which they are fastened, and with which they revolve. The diameter of the carrying-wheel A being greater than the diameter of the carrying-wheel B, and as both revolve the same number of times, the larger wheel will move over a larger space, or travel a greater distance in the same time, which causes the toy vehicle to diverge from a straight course and to move in a circle, the circumference of which depends upon the difference of

the size of the wheels and their distance from each other. The distance between the wheels is regulated by the wheels being made movable upon the shaft or axle, and the circle described by the toy can be contracted or enlarged at pleasure by adjusting the wheels upon the shaft or axle through the use of the set-screw E.

The drawing, which forms a part of this specification, represents the two carrying-wheels as being propelled by the force of a coiled spring similar to that used in the ordinary clock, which is directly connected to the shaft or axle of the carrying-wheels by a train of gear-wheels, the last of which is permanently attached to said shaft or axle, as shown in Fig. 1. When the spring is wound up its force becomes exerted upon the train of gear-wheels, and acting directly through them upon the shaft or axle of the carrying-wheels, a positive motion is thereby imparted to them. Being thus made to revolve, and being of different diameters, they must move in circles of greater or lesser magnitude, according to the difference of their diameters and the distance they are from each other upon the shaft or axle.

I claim as my invention—

1. The two carrying-wheels, of different diameters, attached to a shaft or axle, in combination with a spring and a train of gear-wheels, through which direct connection is made and positive motion is imparted to the carrying-wheels, in the manner and for the purposes as herein substantially described.

2. The combination of the spring and connecting gear-wheels with the shaft or axle, with two carrying-wheels of different diameters made adjustable thereon, to increase or diminish the distance between them, in the manner and for the purposes as herein substantially set forth.

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Witnesses:

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