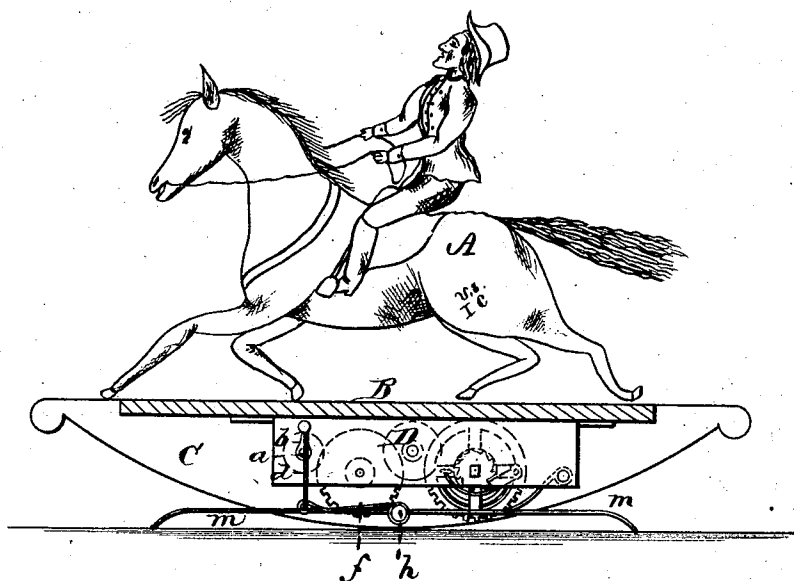


J. B. CUZNER.
Automatic-Toys.

No. 155,225.

Patented Sept. 22, 1874.



WITNESSES.

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By

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UNITED STATES PATENT OFFICE.

JOHN B. CUZNER, OF BRIDGEPORT, CONNECTICUT.

IMPROVEMENT IN AUTOMATIC TOYS.

Specification forming part of Letters Patent No. **155,225**, dated September 22, 1874; application filed February 25, 1874.

To all whom it may concern:

Be it known that I, JOHN B. CUZNER, of Bridgeport, in the county of Fairfield and in the State of Connecticut, have invented certain new and useful Improvements in Mechanical-Toy Movements; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification.

My invention relates to that class of mechanical toys which are actuated by a train of gearing, the motion being imparted by a clock-spring; and the nature of my invention consists in providing a mechanical movement of new construction for mechanical toys, whereby I am enabled to get, in a very simple manner, a rocking motion which can be applied to mechanical toys of various kinds.

In the accompanying drawing, the figure represents a rocking-horse and rider operated by my mechanical movement, that when the same is wound up the toy rocks, and the horse and rider have the appearance of galloping.

A represents a horse and rider, placed upon a platform, B, which is provided with rockers C C. Between the rockers C, under the platform B, is arranged a train of gearing, D, operated by means of a clock-spring. *a* represents a shaft in the gearing, upon the end of which is a crank, *b*. This crank is, by a rod or pitman, *d*, connected with the outer end of a lever, *f*, the inner end of which is attached to a cross-shaft, *h*, having its bearings in the center near the lower edges of the rockers B B. *m m* represent prongs or arms extending to either side from the shaft *h*, and at right angles with it. These arms are usually made of spring-wire, but they may be made rigid, with springs at the shaft.

The operation of the toy is as follows: As the shaft *a* revolves, the connecting-rod *d* imparts a vibratory motion to the lever *f*, which gives the shaft *h* a rocking movement. The

shaft *h*, rocking, carries the wire arms *m m* with it, and presses them to the floor, and continues pressing them till the motion of the rocker is reversed, when the wire arms act as a spring to send the weight the other way; and the same action again takes place with the arms on that side of the shaft, and thus the arms on either side of the shaft work alternately.

The ends of the wire arms *m m* are bent slightly downward and spread a little, in order to enable them to get a more direct and sure hold on the floor. They may also be covered with rubber at the ends, which will prevent any scratching, and also enable the wires to get a better hold by friction.

The spring-arms push the rocker in an opposite direction from what they are going themselves, and thus, until the force of the spring is expended, the rocker moves first one way and then another, with a very natural movement.

I do not confine myself to a rocking-horse in applying the movement I have described. I have simply chosen to illustrate my invention by exhibiting it as applied to a toy of this description. With the same movement I can rock a cradle, or apply it to a toy rocking-chair, in which may be seated a doll or other figure.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The shaft *h* and arms or prongs *m m*, in combination with clock-work or other automatic mechanism for actuating the toy, substantially as herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 19th day of February, 1874.

JOHN B. CUZNER.

Witnesses:

F. W. SMITH,
C. BLAKESLEE.