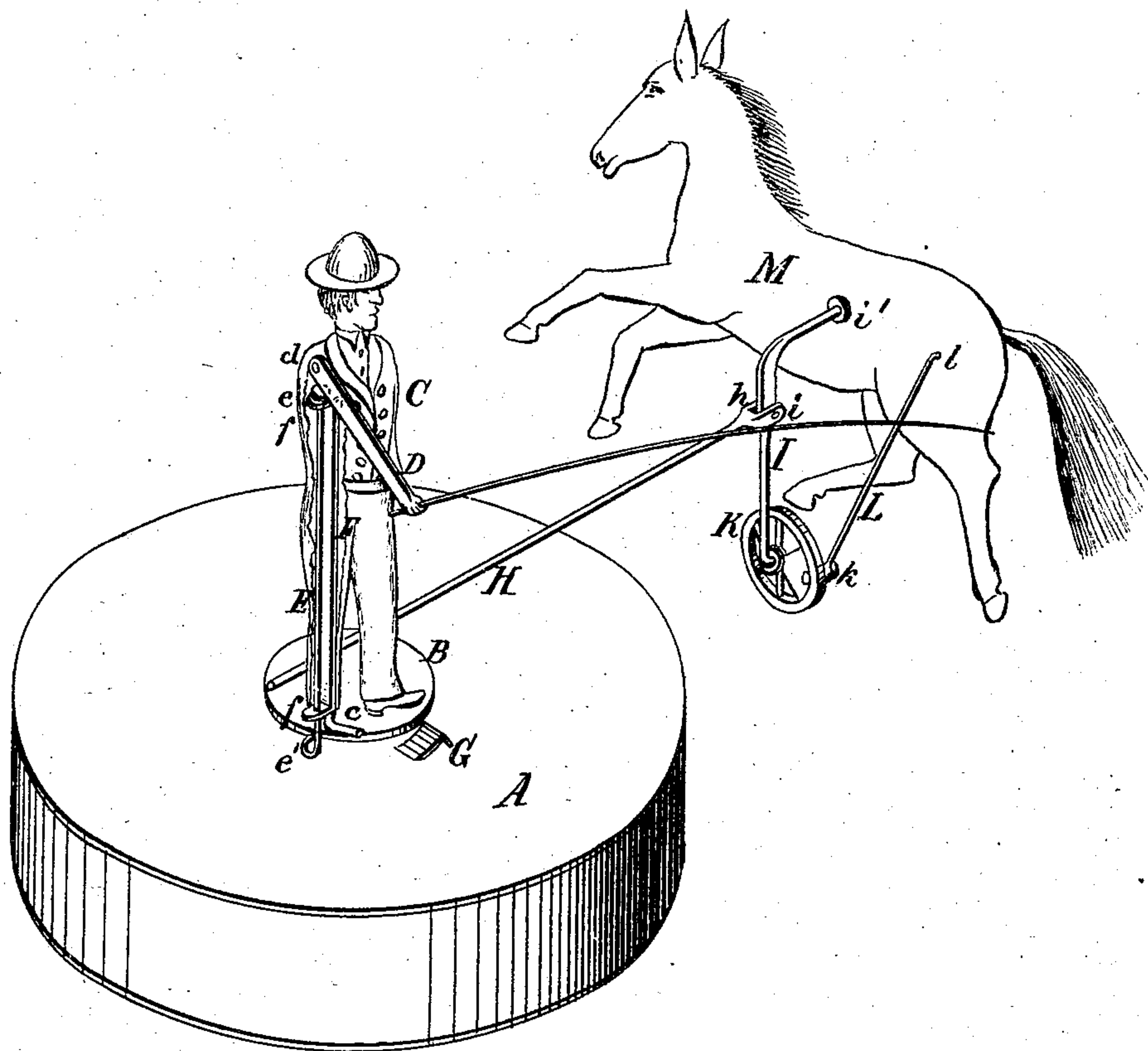


W. H. PAINTER.
Automatic Toys.

No. 152,406.

Patented June 23, 1874.



WITNESSES.

J. P. Theodore Lang.
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UNITED STATES PATENT OFFICE.

WALTER H. PAINTER, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO EDWARD R. IVES, CORNELIUS BLAKESLEE, AND JOHN J. MOTT, OF SAME PLACE.

IMPROVEMENT IN AUTOMATIC TOYS.

Specification forming part of Letters Patent No. **152,406**, dated June 23, 1874; application filed May 16, 1874.

To all whom it may concern :

Be it known that I, WALTER H. PAINTER, of Bridgeport, in the county of Fairfield and in the State of Connecticut, have invented certain new and useful Improvements in Mechanical Toys; 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 toys operated by a clock-movement; and it consists of the figure of a man mounted above the clock-work, and the figure of a horse connected with the clock-work and supported by a small wheel with eccentric motion, for the purpose of imitating the galloping movements of a horse, while the man's arm is moved on its pivot by a lifting-rod, which, at every revolution of man and horse, travels over a wedge-shaped rise on its track, and thus imitates the whipping, with the whip fastened to the hand on the said moving arm.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, which is a perspective view of my invention.

A represents a cylindrical box, containing a clock-motion of ordinary construction, by which a platform, B, is revolved above said box. To the platform B the figure of a man, C, is fastened by means of the rod *c*. The arm D of said figure is pivoted to the shoulder at *d*, and rests on the head *e* of the lifting-rod E, the foot *e'* of which, being of round shape, rests on the top of the box A, and glides over the same. The rod E is steadied by an upright guide-rod, F, with two lugs, *f*, at its extremities, through which the lifting-rod passes. An inclined step or wedge, G, serves to elevate the rod E, and thereby the arm D, when the foot *e'* is carried over it. A bar, H, is fastened to the platform B, and has a head, *h*, at the end, to which an elbow-rod, I, is pivoted by the pin *i*. This joint enables the horse

to lean toward the center at different angles, according to the speed at which he is going, and also accommodates itself to any unevenness of surface, and to pass obstructions which would otherwise stop the motion. The same effect might be produced and the same object accomplished by substituting either a spiral or flat spring in the place of the joint. I prefer, however, the joint, as it is more substantial, durable, and sure.

The horizontal part of the rod I passes through the body of a toy horse, M, at *i'*, where it serves as a pivot. The lower end of the rod I serves as a bearing for the wheel K, which thus supports the rods I and H with the horse M, and which is also provided with an eccentric pin, *k*, and a connecting-rod, L. The connecting-rod L is loosely attached to the body of the horse at *l*. The horse M is suspended at such height above its track that the rocking motion created by the movement of the crank-pin *k* causes the feet of the horse to descend very near the track without touching it, thereby very closely imitating the movements of a galloping horse without checking the operation of the wheel K by the contact of the horse's feet with the track or ground.

The left arm of the man C may be operated in the same manner and by the same means as that described for the right arm, but for a different purpose, such as holding the reins, or making signs to the horse; and the said operation may take place at different times for the right and left arm without changing the principles of my invention, and some other figures might be substituted for the man and the horse. I prefer to provide the figure with suitable clothes to hide the operating parts, but the said parts may be as well placed inside of the figure. The figure C and bar H might also be fastened directly to the shaft, to which the platform B is now attached, if thought best, dispensing with said platform.

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

1. The combination of the figure of a man, C, the pivoted arm D, the lifting-rod E, and

the inclined step G, all arranged to operate by clock-work or other suitable motors, substantially as herein set forth.

2. The combination of the rod H, the elbow-rod I, the wheel K, the crank-pin *k*, the connection-rod L, and the horse M, rotated by clock-work or other suitable means, substantially as herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 9th day of May, 1874.

WALTER H. PAINTER.

Witnesses:

C. L. EVERT,
F. W. SMITH.