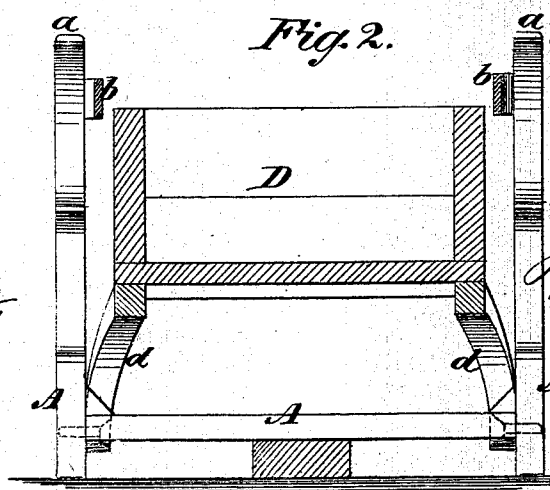
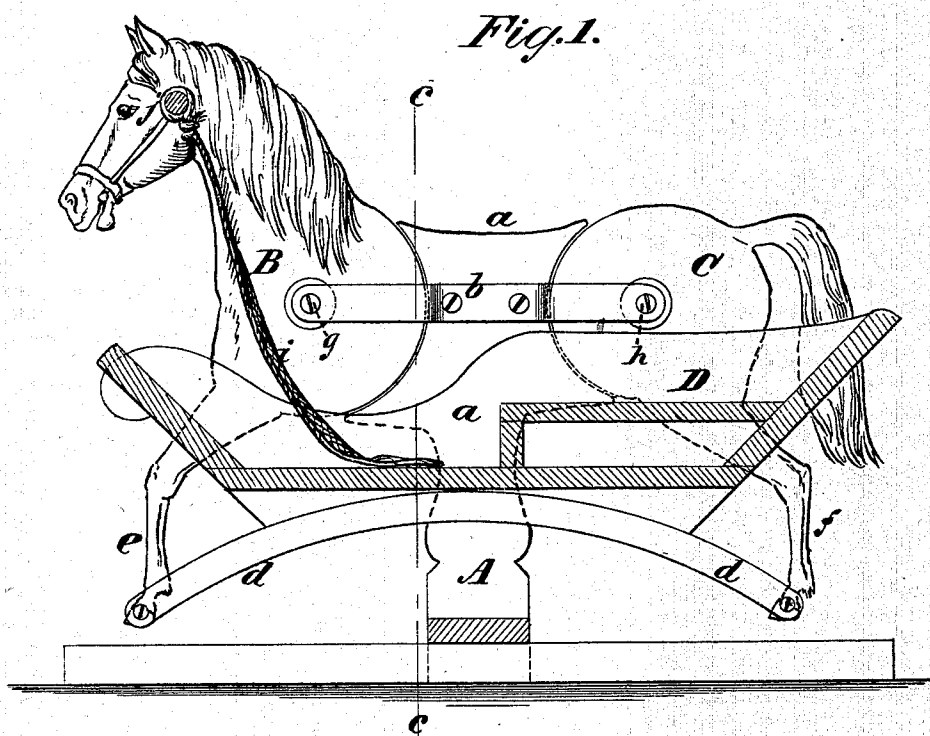


J. A. GRANDALL.
Hobby-Horse Swings.

No. 139,371.

Patented May 27, 1873.



Witnesses
John Becker.
Fred. Hummer

J. A. Crainball
by his Attorneys
Brown & Allen

UNITED STATES PATENT OFFICE.

JESSE A. CRANDALL, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN HOBBY-HORSE SWINGS.

Specification forming part of Letters Patent No. **139,371**, dated May 27, 1873; application filed March 24, 1873.

To all whom it may concern:

Be it known that I, JESSE A. CRANDALL, of Brooklyn, in the county of Kings and State of New York, have invented an Improved Toy-Horse Cradle, of which the following is a specification:

Figure 1 represents a sectional side view of my improved toy-horse cradle. Fig. 2 is a vertical transverse section thereof on the line *c c*, Fig. 1.

Similar letters of reference indicate corresponding parts in both figures.

This invention relates to a new toy-horse cradle for children, in which the movement of the heads, necks, tails, and feet of horses are imitated without displacing their supports on the floor. My invention consists, chiefly, in suspending from the movable front and back parts of an imitation horse a cradle or seat in such manner that when the occupant of the seat draws the rein which is connected with the horses' heads or necks it will cause these heads or necks to be swung backward, the cradle or seat meanwhile moving forward. This motion is the feature of special novelty in the present invention. Toy-horse cradles as heretofore made had the motion of the seat and horse's neck usually parallel—that is to say, when the seat moved back the horse's neck and head would move back too, and they would also both move forward at the same time. By obtaining the opposite direction, however, a better effect is produced and a greater degree of amusement for the occupants insured. I attain this object by securing the seat or cradle to the feet of the imitation horse, which, being outward of the pivots of the head, neck, and tail portions, of course move in a direction opposite to that of the upper or head parts.

In the accompanying drawing, the letter A represents the central supporting-frame of my improved toy-horse cradle. This frame consists of two upright standards, *a a*, which, at their upper ends, form the middle portion of

the imitation horse's body. By the bars *b*, which are rigidly fastened to the inner sides of the standards *a*, the same are connected with the head and back portions B C of the horses, respectively, which back and head portions are pivoted to the side bar or strap *b*, as clearly shown in Fig. 1. The standard *a* forms circular sockets to receive the circular parts of the front and back portions B and C in the manner shown, the circles being described from the pivot points as their centers. D is a seat or cradle fitted between the two standards *a a*, and connected, by lower straps or braces *d d*, with the feet *e f* of the front and back parts B and C, respectively. The feet *e* of the front parts are forward of the front pivots *g*, while the feet *f* of the back parts are backward of the back pivots *h*. When the occupant of the seat D draws the rein *i*, which connects with a cross-bar, *j*, of the horses' heads, or directly with those heads, it will swing them backward, and thereby bring the feet *e* forward and draw the cradle D or seat forward. When subsequently the weight of the cradle and occupant causes the same to swing backward again the necks and heads of B will move forward. In this manner the effect hereinabove indicated will be fully attained.

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

1. The carriage D connected with the vibrating parts B C of the horses below, and respectively in front and back of the points of suspension of said carriage, whereby it is made to move in a reverse direction to the upper portions of the parts B C, substantially as and for the purpose described.

2. The combination of the central uprights *a a* with the vibrating portions B and C, seat or cradle D, and brace *d*, all arranged to operate in the manner indicated.

J. A. CRANDALL.

Witnesses:

A. V. BRIESEN,
MICHAEL RYAN.