No. 785,201. PATENTED MAR. 21, 1905.

J. A. CRANDALL.

SWINGING TOY.

APPLICATION FILED OCT. 12, 1904.

Fig. 1.

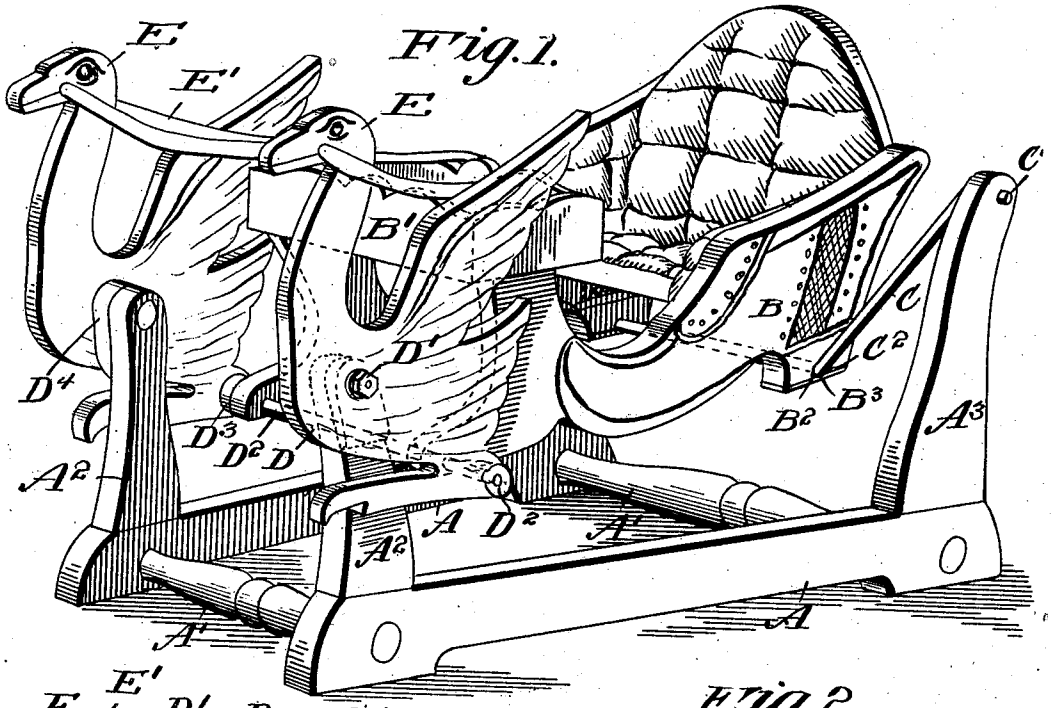


Fig. 2.

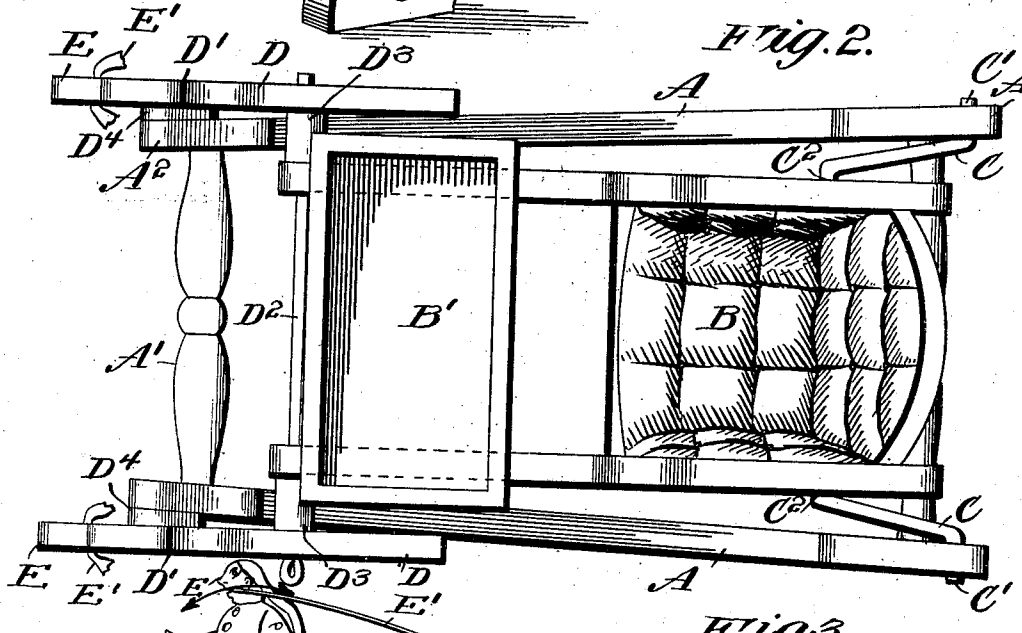
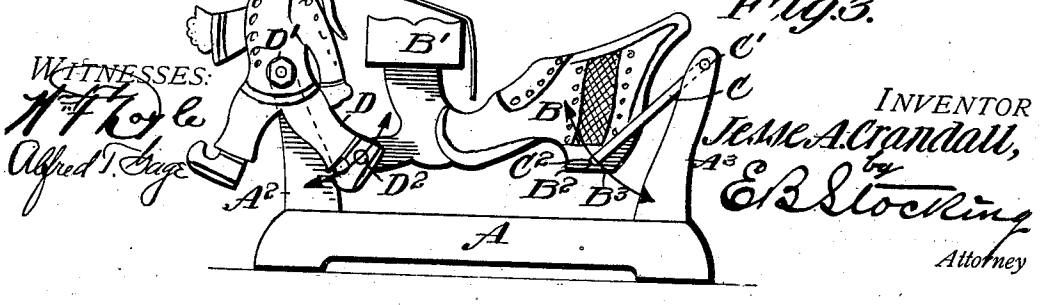


Fig. 3.



WITNESSES:

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No. 785,201. Patented March 21, 1905.

UNITED STATES PATENT OFFICE.

JESSE A. CRANDALL, OF BROOKLYN, NEW YORK, ASSIGNOR OF ONE-HALF TO CHARLES ZORNOW, OF BROOKLYN, NEW YORK.

SWINGING TOY.

SPECIFICATION forming part of Letters Patent No. 785,201, dated March 21, 1905.

Application filed October 12, 1904. Serial No. 228,169.

To all whom it may concern:

Be it known that I, JESSE A. CRANDALL, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Swinging Toys, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to swinging toys, and particularly to a seat for children.

The invention has for its object to mount a swinging seat so that in the oscillation thereof one end of said seat will be alternately elevated and depressed to a greater extent than the other end, and this result is effected by pivotally mounting one end of said seat upon a hanger of greater length than that at the opposite end.

The invention has for a further object to supply one of the hangers with a continuation to form an operating-lever, by means of which the child seated in the toy can produce a movement of the same.

Other and further objects and advantages of the invention will be hereinafter set forth and the novel features thereof defined by the appended claims.

In the drawings, Figure 1 is a perspective of the invention; Fig. 2, a top plan view thereof, and Fig. 3 a side elevation with parts in dotted lines and showing a modification of the front hangers.

Like letters of reference refer to like parts in the several figures of the drawings.

The letter A designates a base composed of opposite members connected together at each end by suitable cross-bars A′. The side pieces of the base A may be of any desired configuration; but a preferable form is here shown having the opposite members diverging toward the rear. The base A is provided upon each side with front standards A^2 and rear standards A^3, which are disposed in substantially the same vertical plane and adapted to support the swinging seat B. This seat may be of any desired construction and configuration and, if desired, provided with a tray B′ at its forward end. It is supported at the rear by hangers C, pivotally mounted at C′ in the standards A^3 and at their lower ends having a pivotal bearing C^2 in the body of the seat. To facilitate the application of the angular rear hanger C, the lower portion of the seat B is provided with a bearing-seat B^2, in which a cross-bar of the hanger will lie, and to prevent the accidental displacement of the seat from the hanger in the swinging movement a plate B^3 is provided at the lower end of this bearing-seat. The forward end of the seat is supported by hangers D, pivotally connected at D′ to the upper portion of the standards A^2 and at their lower ends pivoted to the seat by a cross rod or bolt D^2, which is provided intermediate of the forward hangers D and the front of the seat with spacers D^3 for the purpose of preventing the swinging seat moving laterally and coming in contact with the forward hangers or figures extending therefrom. For the purpose of distributing the strain and providing a long bearing upon the forward standards spacer-blocks D^4 are interposed between the hangers D and the forward standards. The upper portion of the hanger D is extended above the pivotal point to form a lever E, and this lever has connected thereto a suitable bridle or reins E′, by means of which the occupant of the seat may oscillate the lever E and hanger.

The hanger C is of greater length than the hanger D—that is, the distance between the pivotal points C′ and C^2 is greater than between D′ and D^2—so that when the lever E is drawn toward the seat the lower end of the hanger D travels forward and downward, whereby the seat is tilted at a forward inclination. The reverse of this operation tilts the seat at a rearward inclination during the return oscillation of the hangers.

For the purpose of producing an attractive toy the hanger D and lever E may be constructed in the form of any desired animal or object—for intance, a swan, as shown in Fig. 1, or a Chinaman, as shown in Fig. 3—and such object is usually pivoted upon the outer faces of the standards A^2, so as to partially conceal the same. The forward end of the side pieces of the seat are pivoted to the cross-bar D^2 and lie behind the rear portion of the hanger D, so as to be concealed thereby, while the hangers C extend from the inner faces of the stand-

ards A^3 for a similar object. It will be thus seen that the seat lies within the standards A^3 and the side bars of the base, while the figures constituting the forward hangers and levers lie outside of the forward standards A^2 and in substantially the vertical plane of the rear standards. The parts are thus retained in perfect alinement and held against any lateral movement thereof which would cause the same to strike the standards in the movement of the parts.

From the foregoing description the operation of the seat will be apparent, and the movement produced therein is different from the regular swing or oscillation present in hobby-horses or swings where the supporting-hangers are of equal length. The use of one hanger of greater length than the other, and consequently traveling in a larger arc, produces an ascending movement of one end of the seat while the opposite end is traveling through the arc traversed by the shorter hanger. This causes the front portion of the body to turn upon its pivotal connection with the hanger D and produces a material dip coincident with the elevation of the rear end. The motion thus attained is similar to that of a person lifting and swinging forward a child in his arms—that is, an upward and outward movement in the arc of a circle.

A tapering form of base materially strengthens the same and economizes in space, as the figures are disposed within the greatest width of the base, and thus protected from injury, and the hanger-pivots brought into substantially the same vertical plane.

The parts are so balanced that the seat remains in a horizontal position; but it rises or can be swung with the application of very little power to the bridle or reins E′ by the occupant of the seat.

It will be obvious that changes may be made in the details of construction and configuration without departing from the spirit of the invention as defined by the appended claims.

Having described my invention and set forth its merits, what I claim, and desire to secure by Letters Patent, is—

1. In a swinging toy, the combination with a base provided with standards, of a seat, a pivoted hanger connecting said seat with one of said standards, and a pivoted hanger connecting the opposite end of the seat to the other standard and of materially greater length than the hanger at the opposite end of the seat.

2. In a swinging toy, the combination with a base provided with standards, of a seat, a pivoted hanger connecting the rear of said seat with a rear standard, a pivoted hanger of materially less length than the rear hanger and connecting the forward end of the seat and front standard, and a lever extending from the upper end of said front hanger.

3. In a swinging toy, the combination with a base provided with standards, of a seat, a pivoted hanger connecting the rear of said seat with a rear standard, a pivoted hanger of materially less length than the rear hanger and connecting the forward end of the seat and front standard, an arm extending from the upper end of said front hanger, a cross-bar connecting the lower ends of the opposite front hangers and upon which the forward end of the seat is pivotally mounted, and means extending from said arm to said seat for actuating the arm.

4. In a swinging toy, the combination with a base having oppositely-located standards at its ends, of a seat lying within said standards, a hanger pivotally connected to the rear standards and seat, front hangers of materially less length than said first-mentioned hangers and located upon the outer face of the front standards, a cross-bar connecting the lower ends of said front hangers and upon which the forward end of the seat is pivotally mounted, an arm extending above the pivotal point of the front hangers, and means extending from said arm to the seat for actuating the same.

5. In a swinging toy, the combination with a base composed of opposite side pieces having front and rear standards rising therefrom, cross-bars connecting said side pieces at the front and rear, of a seat, a pivoted hanger connecting said seat with the rear standards, a pivoted hanger of materially less length than the rear hanger connecting the front portion of the seat with the front standards, spacer-blocks between said forward hangers and front standards, and spacer-blocks between the forward hangers and the front supports of the swinging seat.

6. In a swinging toy, the combination with a base of greater width at its rear than at its forward portion, oppositely-located standards at each end of the base, of a seat lying within said standards, hangers connected to the rear standards and seat, and hangers pivoted to the front standards and seat and disposed in substantially the vertical plane of the rear standards.

7. In a swinging toy, the combination with a base provided with standards, of a seat, a pivoted hanger connecting said seat with one of said standards, and a figure pivotally mounted upon the front standards and comprising at its lower portion a hanger of materially different length from the rear hanger and at its upper portion an arm extending above the pivotal point of the figure.

In testimony whereof I affix my signature in presence of two witnesses.

JESSE A. CRANDALL.

Witnesses:

PERCY G. B. GILKES,

ERNEST T. P. GREENIDGE.