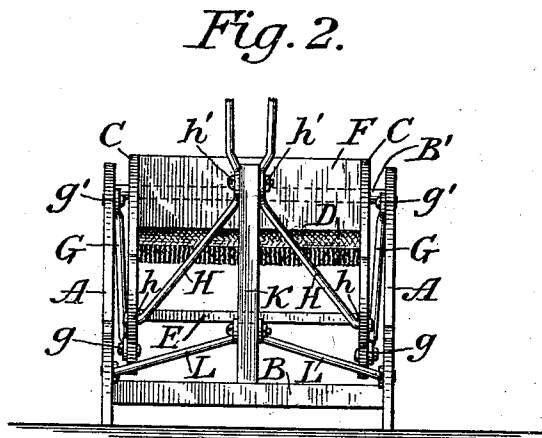
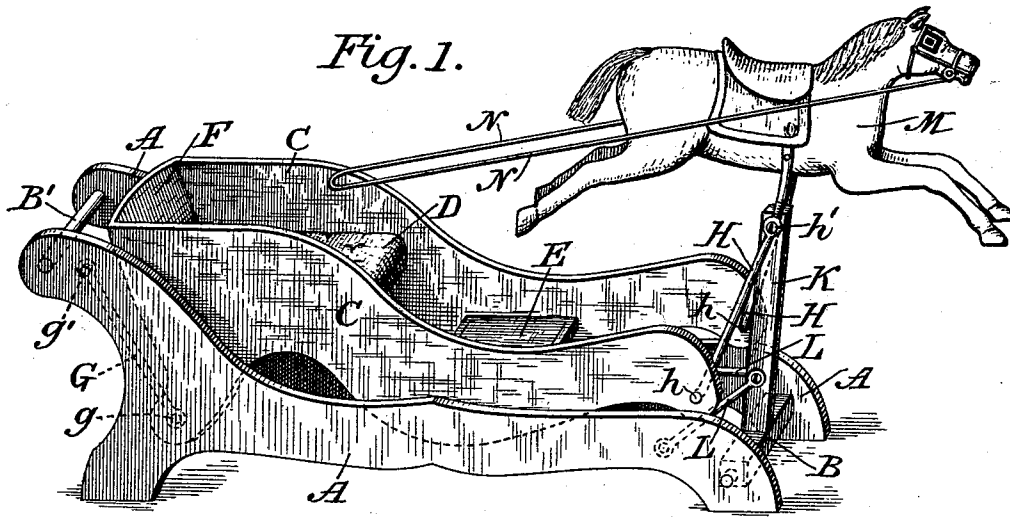


(No Model.)

W. E. CRANDALL & M. SMITH.
SWING.

No. 521,335.

Patented June 12, 1894.



Attest:
A. N. Jespersen,
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Inventors:
William E. Crandall
and
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Atty.

UNITED STATES PATENT OFFICE

WILLIAM E. CRANDALL AND MATTHIAS SMITH, OF NEW YORK, N. Y.

SWING.

SPECIFICATION forming part of Letters Patent No. 521,335, dated June 12, 1894.

Application filed January 4, 1894. Serial No. 495,588. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM E. CRANDALL and MATTHIAS SMITH, residents of the city, county, and State of New York, have invented a new and useful Improvement in Swings; and we do hereby declare that the following is a full, 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.

Our invention relates to swings adapted for small children and commonly known as "swinging horses."

The object is to produce such a swing of novel construction and mode of operation and one which shall afford exercise for the muscles of the child's arms as well as for those of the body.

The invention consists in the construction hereinafter described and claimed.

In the accompanying drawings: Figure 1 is a perspective view of our improved swing. Fig. 2 is a front view, with the figure of the horse removed.

The supporting frame-work of our improved swing may be of any suitable construction but consists preferably of side-frames A, A, united and held firmly in position by suitable cross-bars, as indicated at B and B'. Within this frame-work is supported a car or chair in such a manner as to be capable of swinging to and fro. The car or chair may be given any desired form but comprises essentially the side-frames C, C, and a seat D which secures the side frames together. It may also have a foot-board E and a back F. The car or chair is supported at the rear end by links G, G, which are pivotally attached to the chair, as at g, and at the other end to the supporting frame-work, as at g'. The front end of the chair is supported by rods H, H, which are pivotally connected to the chair frames, as at h, h, and converge until they can be pivoted, as at h', upon a central post K which is erected upon the cross-

bar B. The post is further braced by rods L, L, which are firmly secured to the post and to the side-frames below the ends of the chair. The rods H, H, are extended above the pivot h' and support between them an object M, preferably in the form of a horse, and to this object are attached the light rods N, N, which extend rearwardly within reach of the child seated within the car or chair and constitute reins. The reins are not necessarily rigid but might be made of the usual material employed for that purpose.

The mode of use of our improved swing will be readily understood. The child seated within the chair seizes with its hands the reins N, N, and with a gentle pull starts the swing in motion. The arms of the child are thus exercised and the movement of the swing does not depend, as usual in other devices of this character, upon the movements of the child's body alone. Moreover, the nature of the motion combined with the child's own control over such motion and with the moving image of a horse before it affords a constant pleasure and source of amusement.

We claim as our invention—

In a swing, the combination of a supporting frame work a rigid post secured to the frame work between the front ends thereof, a car or chair, links pivotally connecting the rear of said car to the frame work, converging rods H pivoted at one end to the front of the car said rods being pivoted upon either side of said post near its upper end, and having upwardly extending parts forming a yoke by which yoke a suitable image is supported, and reins attached to said image, substantially as described.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

WM. E. CRANDALL.
MATTHIAS SMITH.

Witnesses:

JOHN E. SMITH,
JOHN G. WEIGOLD.