J. J. JANEZECK.

SWING.

No. 191,683. Patented June 5, 1877.

Fig. 2.

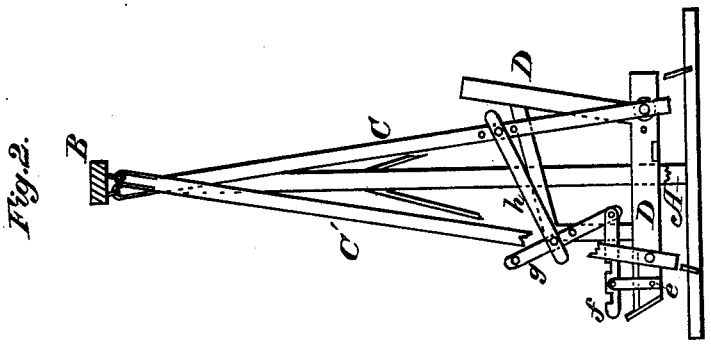
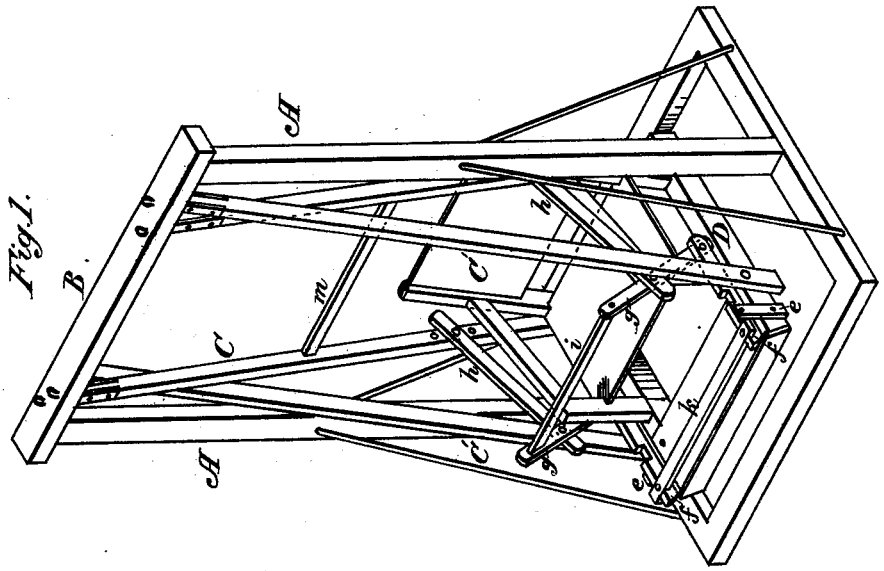


Fig. 1.



Attest:

J. H. Schott.

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Attn.

UNITED STATES PATENT OFFICE.

JOHN J. JANEZECK, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO WM. H. FAULKNER, OF SAME PLACE.

IMPROVEMENT IN SWINGS.

Specification forming part of Letters Patent No. **191,683**, dated June 5, 1877; application filed May 12, 1877.

To all whom it may concern:

Be it known that I, JOHN J. JANEZECK, of Washington, in the county of Washington and District of Columbia, have invented certain new and useful Improvements in Swings; and I 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, which form a part of this specification.

This invention relates to improvements in that class of swings which are set and maintained in motion by the occupant; and it consists in the construction and arrangement of the various parts, as hereinafter described and claimed, whereby the swing may be readily adjusted for the use of a child or adult, being worked with the greatest ease by a gentle pulling and pushing motion, alternately, thus furnishing a graceful and wholesome exercise similar to rowing.

Figure 1 is a perspective view of my improved swing; and Fig. 2 is a vertical side elevation of the same, partly in section.

The supporting-frame of the swing consists of two standards, A A, resting upon a quadrangular foundation-frame, and connected at the top by a cross-beam, B, suitable braces being provided to insure strength. C C′ are the hanging rods, two on each side, which are suspended in any appropriate and safe manner from the cross-beam B, so that the inner or rear rods C are attached in front of the outer or forward rods C′, the two rods on each side thus crossing each other near their upper ends. These hanging rods support the chair D, which is secured to their lower ends by suitable pivot-bolts. Motion is imparted to the chair D by means of the levers *e g* and links *f h* on each side, the rear hanging rods C also acting as additional levers. The levers *e* and *g* are pivoted, at or near their lower ends, to the chair-frame, and are connected by the link *f*, the lever *g* being also connected with the rear hanging rod or lever C by means of the link *h*. A hand-bar, *i*, extends across the front of the chair from the upper end of the lever *g* on one side to the corresponding lever on the opposite side, and a foot-bar, *k*, extends from the forward end of the link *f* to a like point on the opposite link.

In starting the swing, the occupant should pull gently on the hand-bar *i*, at the same time pressing with the feet upon the foot-bar *k*, thus securing the benefits of a double leverage, which throws the upper end of the lever *g* backward, its lower end moving forward, assisted by the pressure of the feet upon the foot-bar *k*, and carrying with it the link *f* and lever *e*, attached thereto, so as to force backward the chair D. As the chair returns to a perpendicular position the occupant pushes on the hand-bar *i* and slacks the pressure on the foot-bar *k*, thus forcing forward the upper end of the lever *g*, which carries its lower end backward, drawing with it the link *f* and upper end of the lever *e*, so as to carry the chair forward.

By means of the link *h*, connecting the lever *g* with the rear hanging rod C, the latter is also converted into a lever, as before stated, and the leverage is thus distributed throughout the chair-frame, producing a steady and equable motion, and preventing any undue strain. This effect is further increased by the manner of crossing the hanging rods C C′ near their upper ends, and by the employment of the cross brace *m*, connecting the two rear rods or levers C, which construction allows the hanging rods a wide range of oscillation without danger of their snapping or straining, and without liability to jar in the back and forward motion of the chair.

Thus by alternately pulling and pushing upon the hand-bar *i*, together with a slight pressure of the feet upon the foot-bar *k* as the chair recedes, the swing may be easily maintained in motion by the occupant without requiring any unusual exertion, and causing much less fatigue than that involved in rowing a boat, which exercise it resembles. By applying the power in a direction contrary to that required for the purpose of operating the swing, the hand-bar *i* and attached levers will act as brakes to suspend its oscillation.

The swing, constructed as described, is capable of ready adjustment to meet the wants of children or adults using it, the various levers, bars, and rods employed in its propul-

sion being provided with suitable holes or recesses, by which they may be arranged and pivoted with relation to each other, so as to increase or diminish the leverage to suit the weight and power of the occupant. As the chair, when at rest, is only a few inches from the ground, easy access is afforded for children, and the hand-bar, properly arranged in place, will prevent them from falling out when the swing is in motion.

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

The combination, with the frame A B and hanging rods C C′, crossed near their tops, and connected by the brace *m*, of the chair D, provided with the levers *e g*, links *f h*, and bars *i k*, substantially as shown and described.

In testimony whereof I have hereunto affixed my signature this 12th day of May, 1877, in presence of two witnesses.

JOHN J. JANEZECK.

Witnesses:
A. DE MOWBRAY,
CHARLES P. WEBSTER.