

(No Model.)

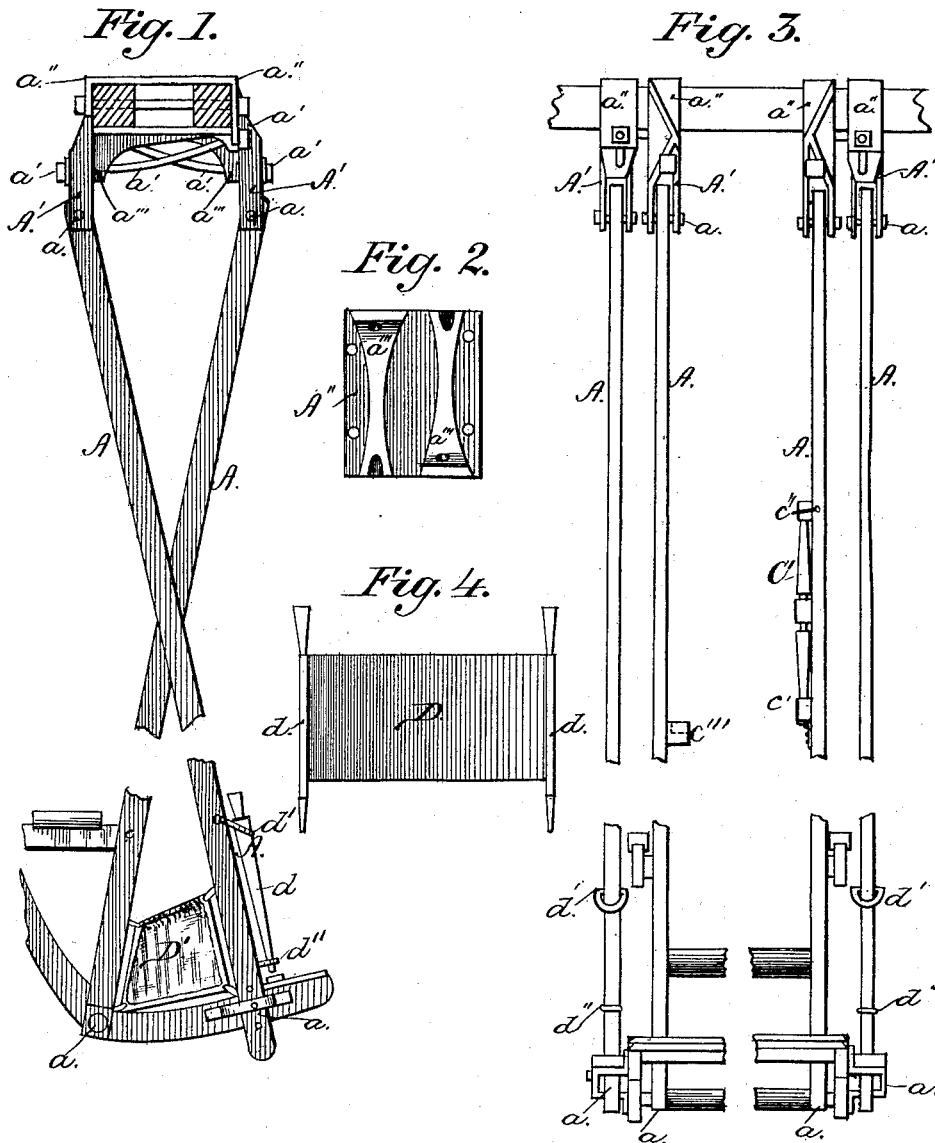
2 Sheets—Sheet 1.

T. W. BOWEN.

SWING.

No. 345,950.

Patented July 20, 1886.



Witnesses:  
Parker & Smith  
Fred Keller

Inventor:  
Thomas W. Bowen  
By B. C. Pole  
his Atty.

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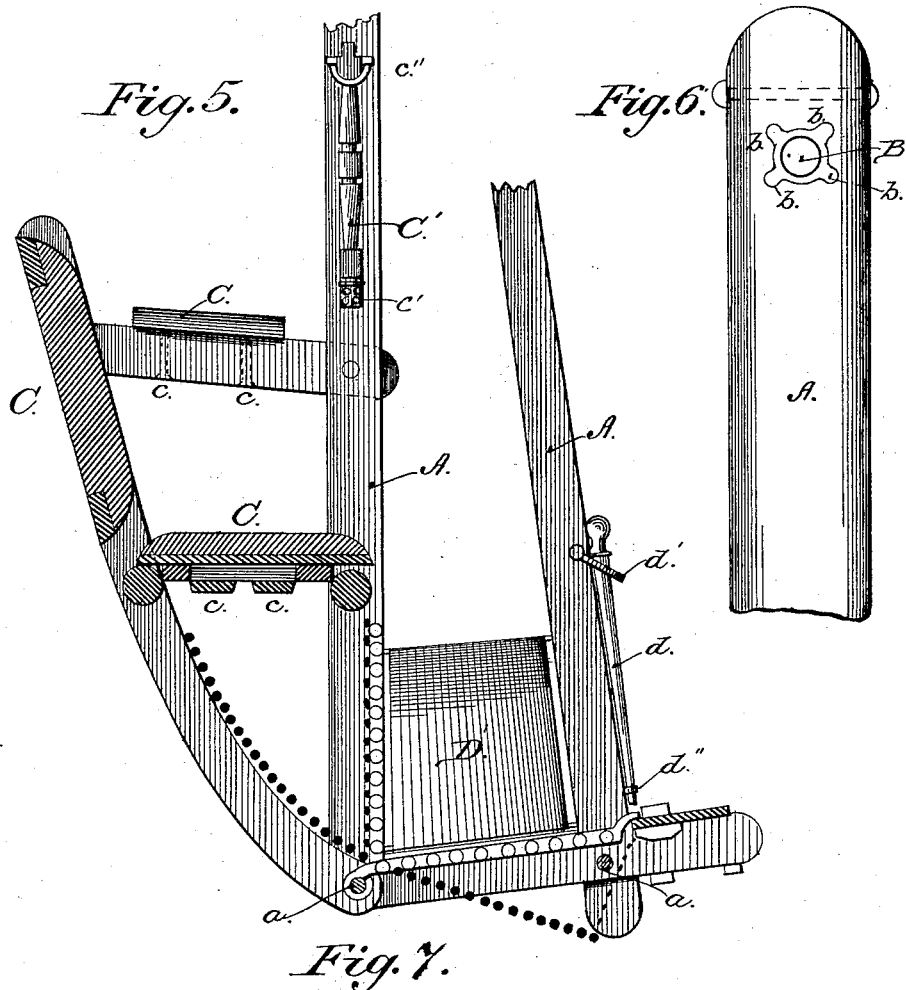
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Parker & Sweet  
Fred. H. Bell

Inventor:  
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# UNITED STATES PATENT OFFICE.

THOMAS W. BOWEN, OF PHILADELPHIA, PENNSYLVANIA.

## SWING.

SPECIFICATION forming part of Letters Patent No. 345,950, dated July 20, 1886.

Application filed February 5, 1886. Serial No. 190,858. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS W. BOWEN, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and new useful Improvements in Swings and Attachments Therefor, of which the following is a specification, reference being had therein to the accompanying drawings.

Figure 1 is a side elevation of my swing. Fig. 2 is a plan of the under hanger-plate. Fig. 3 is a front view of the swing. Fig. 4 is a view of the front curtain and its sticks. Fig. 5 is a sectional side elevation of the swing-frame, arm-rest, seat, and treadle, with side curtain and gauze screens attached. Fig. 6 is a side view of the arm, showing the end of the hinge-bolt and eared pipe-cylinder bearing. Fig. 7 is a bottom view showing the manner of attaching the cushion-seat to the frame of the swing.

In the drawings the same letters refer to the same parts, which are thus described.

A shows the four arms or hanging rods, of which the outer one on each side passes from the rear at the top to the front at the bottom, and the inner one extends from the front at the top to the rear at the bottom. All hang on hinge-bolts at top and bottom, as shown at *a*, so as to carry the swing easily and steadily with little friction.

The arms A are supported by the hinge-bars A' and strap devices *a''*, in combination with the hanger-plate A'', which is made "right and left," and consists of a solid plate or casting with the curved rib projections *a'''*. This plate bolts securely to a set of overhanging cross-beams, which form part of the upper frame-work of the swing. It also fits against and fastens firmly to the hinge-bars A' by means of the bolts *a'*, which pass through the ends of the rib projections, one end of each rib being perforated and the other slotted for that purpose. The bolts are secured by heads and nuts. The hinge-bars A' are made thinner as they extend above the clamping-bolts *a'*, and still further extend as broad straps *a''* over and across the top of the cross-beams, thus forming a strong clamp, properly secured by bolts and nuts, and making, in combination with the frame-work and hanger-plate, a steady and firm hanging device, substantially as shown

and described. It is obvious that this construction may be varied by making the clamp in parts instead of continuous, such parts being secured and attached by bolts and other proper fastenings. The hinge-bars A' extend below the hanger-plate A'' to receive the arms of the swing, which are secured therein by the hinge-bolts *a*. This gives room, strength, and facility for a clear, high, and steady sweep of the swing to a position above the horizontal without increasing the length of the arms. The hinge-bolts *a* are bushed by a pipe-cylinder, B, inserted as a bearing, which passes through the arm of the swing, and is provided with an eared rim, *b*, to receive the rivets which secure it in the arm, as shown in Fig. 6.

To the frame-work of the seat is attached a removable cushion or cushions, C, of plush or other suitable material, such attachment being by means of bolts or screws *c*, as shown in Fig. 7.

To prevent wear and tear by frequent driving and withdrawing of the screws, nuts may be set in the bottom of the cushion-frames to receive the screw-bolts in the usual mode of setting stove-bolts. In like manner cushions are attached to the back and chair-arm.

Above the arm of the chair is a guard-bar, C', attached by a hinge, *c'*, to one front arm of the swing and held upright by a link, *c''*. This bar, when loosed from the link, falls across to the other arm and fastens by a catch or other equivalent device at *c'''*, to prevent a child or other occupant from falling or being thrown from the seat. To the front of the outer arms is attached the gauze curtain D by sticks *d*, links *d'*, and loops *d''* to exclude from view the feet and limbs and secure privacy and pleasure in use. A like curtain, D', with elastic edges, gathered so as to expand or contract by the recession or approach of the arms as the swing moves, is attached by its elastic band to the side arms by means of rings, loops, hooks, or other suitable devices. Gauze-work and screens are also attached at convenient angles around the seat, back, and arms of the chair, so arranged, at pleasure, as to conceal from view and at the same time admit the air, substantially as shown and described.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is as follows:

1. The combination of the frame-work of the swing with the arms A, the hinge-bars A', the right and left hanger-plate A'', the hinge-bolts a, the clamping-bolts a', and the strap devices a'', substantially as shown and described.

2. In combination with a swing, the front curtain, D, with its sticks d, the arms A, the links d', and the loops d'', substantially as shown and described.

3. In combination with a swing, the side curtain, D', gathered at its edges, secured to the elastic binding, and provided with suitable

devices for securing the same to the arms A, so as to allow for varying distance while in motion, substantially as shown and described.

4. In a swing, the gauze screens at bottom, side, front, and rear, in combination with the seat, frame-work, chair, arms, and curtains, substantially as shown and described.

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

THOMAS W. BOWEN.

Witnesses:

ROBT. H. JONES,  
JNO. O. COPE.