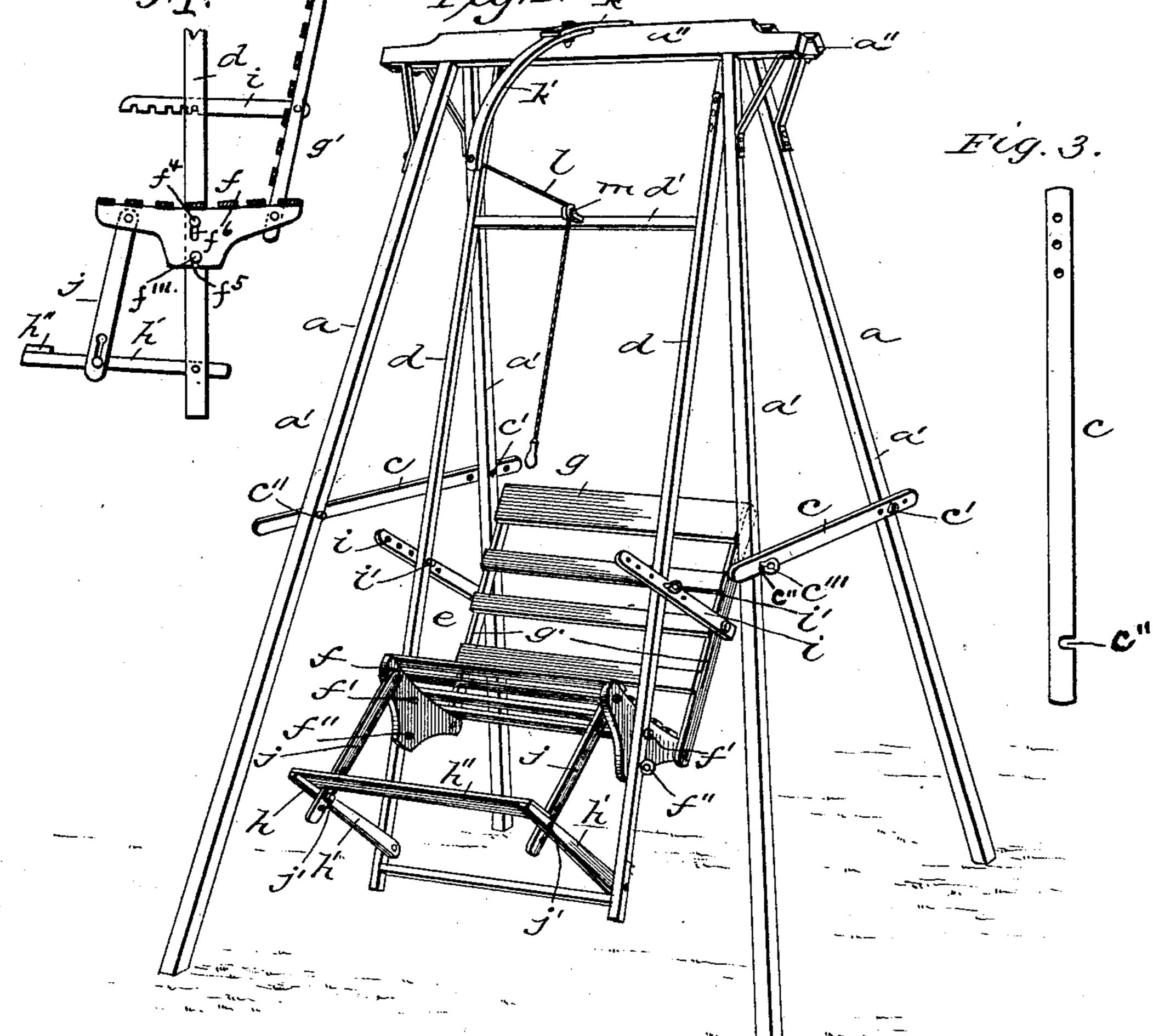
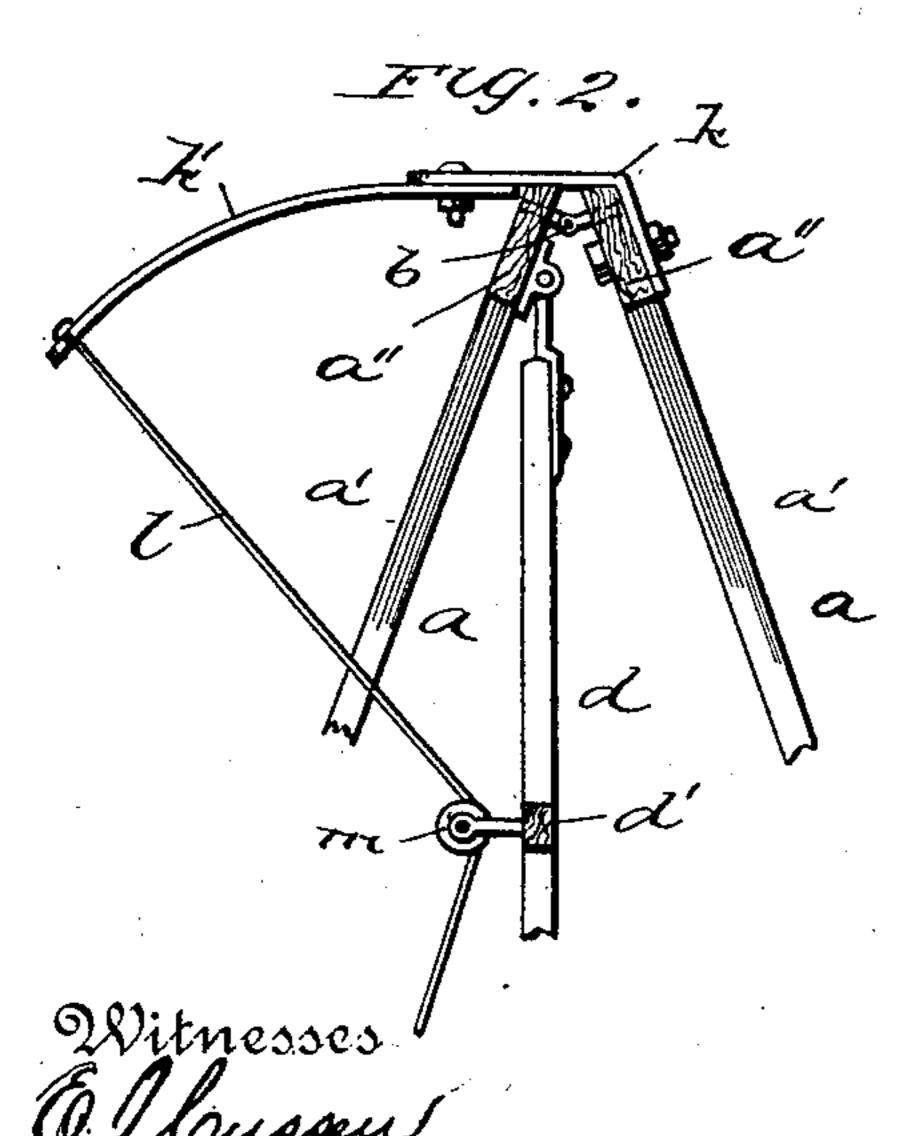
## J. B. SWEETLAND.

SWING.

No. 481,439. Patented Aug. 23, 1892. Fig. 3.





Tuventor

## United States Patent Office.

JEROME B. SWEETLAND, OF PONTIAC, MICHIGAN.

## SWING.

SPECIFICATION forming part of Letters Patent No. 481,439, dated August 23, 1892.

Application filed January 13, 1892. Serial No. 417,967. (No model.)

To all whom it may concern:

Be it known that I, JEROME B. SWEETLAND, a citizen of the United States, residing at Pontiac, in the county of Oakland and State of Michigan, have invented certain new and useful Improvements in Swings, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to new and useful improvements in swings, and it relates more particularly to that class of swings used on lawns and in houses.

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It has for its object to provide a swing of simple construction, the seat of the chair of which, with the foot-rest and back-rest, may be adjusted to suit the occupant.

Another of its objects is to provide means whereby the occupant may give motion to the swing and cause the chair to swing high or

20 low, rapidly or slowly, as desired.

The invention consists in the novel combination and arrangement of parts, that are more fully hereinafter described, and particularly pointed out in the claims appended.

In the drawings, Figure 1 is a perspective view of my improved adjustable swing. Fig. 2 is a vertical section of the upper portion. Fig. 3 is a detail view of one of the side bars of the folding supporting-frame. Fig. 4 is a vertical section of a modification of the chair.

In the drawings, a a designates the two sections of a folding supporting-frame, each of which consists of the two outwardly-inclined bars a' a', connected at their upper ends by 35 the cross-bar a''. These cross-bars are parallel and close to each other and are hinged together by hinges b, secured to their upper edges. Side bars c c are detachably secured to the outer sides of the bars a' preferably 40 midway between their ends and connect the two sections a a and hold them apart. These side bars c are provided at one of their ends with the removable bolts c' and a series of perforations and at their other ends with the 45 notches c'', in their lower edges in which fit pins or bolts c''', secured in the front bars a'of the sections a. By this construction the bars a' of the supporting-frame may be adjusted any suitable distance apart, and when 50 it is desired to store or ship the swing the bars c may be lifted off the pins c''', when the 1

sections a may be brought closely together, as is evident.

To the rear side of the cross-bar a'' of the front section  $\alpha$  of the folding supporting- 55 frame is pivoted in any suitable manner the standards or side bars dd of the swing-frame. These side bars are of suitable length and carry between them at their lower ends the adjustable chair or swing seat e. This chair 60 consists of the seat f, the back-rest g, and the foot-rest h. The side bars f' f' of the seat are pivoted at about their centers to the inner side of the bars d d of the swing-frame and are held in their normal position by the 65 removable bolts f'', which pass through the side bars d and enter the side bars of the seat below their pivots, as clearly shown in Fig. 1 of the drawings. These side bars are connected by the seat-bars, which are secured to 70 the upper edges of the said side bars. The side bars g' g' of the back-rest g are pivoted at their lower ends to the rear ends of the seat side bars. The rear ends of the arms i of the chair are pivoted to the outer sides of these 75 side bars g' of the back-rest, about midway their ends, the front ends of said arms extending forward of the bar d of the swing-frame. and having a series of perforations, through one of which removable bolts i' pass, their 80 inner ends entering the bars d of the swingframe. By means of these removable bolts and the series of perforations in the arms i ithe inclination of the back-rest may be changed to suit the occupant of the chair.

The inner ends of the arms h'h' of the footrest h are pivoted to the inner side of the bars d at the lower ends thereof, and these arms extend outwardly and upwardly, and their outer ends are connected by the cross-bar h'', 90 on which the feet rest. The foot-rest is supported by means of two bars j j, whose upper ends are pivoted to the forward ends of the side bars of the chair-seat. The lower ends of these bars are provided with a series of per- 95 forations, through one of which removable bolts j' pass, their outer ends entering the arms h' of the foot-rest. By means of these removable bolts and the perforations in the bars j the foot-rest may be raised or lowered, 100 as described.

When it is desired to fold the swing for

storage or shipping, the chair may be folded by removing the bolts j', when the foot-rest and the bars j may be folded in toward the bars d d of the swing-frame. If the bolts f''5 are removed, the side bars of the chair-seat may be folded parallel with the bars d, and if bolts i' are removed the back-rest and arms imay be folded in toward the bars d, making when the sections a a are folded together a

10 very compact package.

To the rear side of the cross-bar a'' of the rear section a of the supporting-frame is secured the downwardly-bent end of the forwardly-extending plate k. This plate k bears 15 on the upper edges of bars a'' and its forward end extends slightly beyond the front side of the cross-bar of the front section of the folding frame and has secured to it by a single bolt the forwardly-extending spring-arm k'. Se-20 cured in the forward end of this downwardlycurved spring is one end of an operating-cord l. This cord passes over a pulley m, secured on the cross-bar d', secured between the side bars d of the swing-frame, and its lower end 25 is provided with a hand-hold, which hangs in a position to be easily grasped by the occupant of the chair. The spring-bar k' may be turned sidewise and parallel with the crossbars a'' when folding the swing by loosening 30 the bolt, which secures it to the plate k. The object of making this a spring-bar is to permit of the use of a short cord l and to cause the cord to be quickly drawn back after it has been drawn down by the occupant in pulling 35 the swing forward. This spring-arm also assists the operator in imparting to the swing an easy resilient motion free of sudden jerks, as is evident. In stopping the swing it is simply necessary for the operator to pull on 40 the rope as the chair swings backward, the strong spring-arm serving to cushion or soften the unpleasant jerk that would otherwise occur at the sudden arresting of the swing. The spring-arm k' may, if desired, be extended 45 rearwardly and bent downwardly at its rear end and said downwardly-bent end secured

scribed, to facilitate its folding. In Fig. 4 I have shown still another modified form of my chair. In this construction it will be observed it is not necessary to remove the bolts when folding the chair. The arms of the chair are provided with notches 55 in their under edges, said notches engaging headed pins secured in the outer side of the side bars which support the chair; and instead of providing removable bolts to secure the foot-rest h and arms j together I form a 60 slot in the lower end of arm j and enlarge said slot at its upper end in order to pass the

to the upper part of the frame; but I prefer

to secure it to the plate k, as previously de-

head of a pin secured on the side of the footrest arms through it, and the seat side bars are secured to the side bars, which support the swing by the headed pins f''' and  $f^4$  and 65 slots  $f^5$  and  $f^6$ , as shown. When it is desired to fold this chair, it is only necessary to raise the side bars of the chair until their lower edges are free from the lower pins f''', when they may be turned on their pivots, (the up- 70 per pins  $f^4$ .) The chair, being secured pivotally together, folds very readily, or, if desired, the parts may be separated, as is evident.

Having thus fully described my invention, what I claim, and desire to secure by Letters 75

Patent, is—

1. The combination of a pair of foldable supports, a pair of swinging bars dd, pivototally depending therefrom and connected together, seat side bars ff, each provided with 80 a closed vertical slot  $f^6$  midway its ends, and an open notch or slot  $f^5$  in its lower edge, bolts  $f^4$  and  $f^3$ , passing through said slots and entering the bars d, thereby rendering the side bars vertically movable and capable of fold- 85 ing, seat-slats connecting these side bars, a pivoted back detachably and adjustably connected to the swinging bars d by arms i, a forwardly-projecting foot-rest, and bars j, depending from the seat side bars and detach- 90 ably connected to the foot-rest, substantially as described.

2. The combination of a pair of supports hinged together and adapted to fold, a swing depending therefrom and adapted to fold, a 95 bar projecting forwardly from the upper end of the support, this bar being pivotally connected to the support, so as to fold laterally, and an operating-cord connected to the end of this bar and carried down to within reach 100 of the occupant, substantially as described.

3. In a swing, the combination of an adjustable and folding supporting-frame constructed of two sections hinged together at their upper ends and held apart, as described, 1c5 a swing supported in the upper end of one of said sections, an angle-plate secured to the upper end of the rear section of the supporting-frame extending forwardly over the top of the sections and bearing on their upper 110 edges, a spring-bar secured to the forward end of this plate, as described, and a cord attached to the free end of this bar and extending to the swing-seat in a position to be grasped by the occupant, substantially as de- 115 scribed.

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

JEROME B. SWEETLAND.

Witnesses:

CHARLES P. GROW, DAVID S. HOWARD.