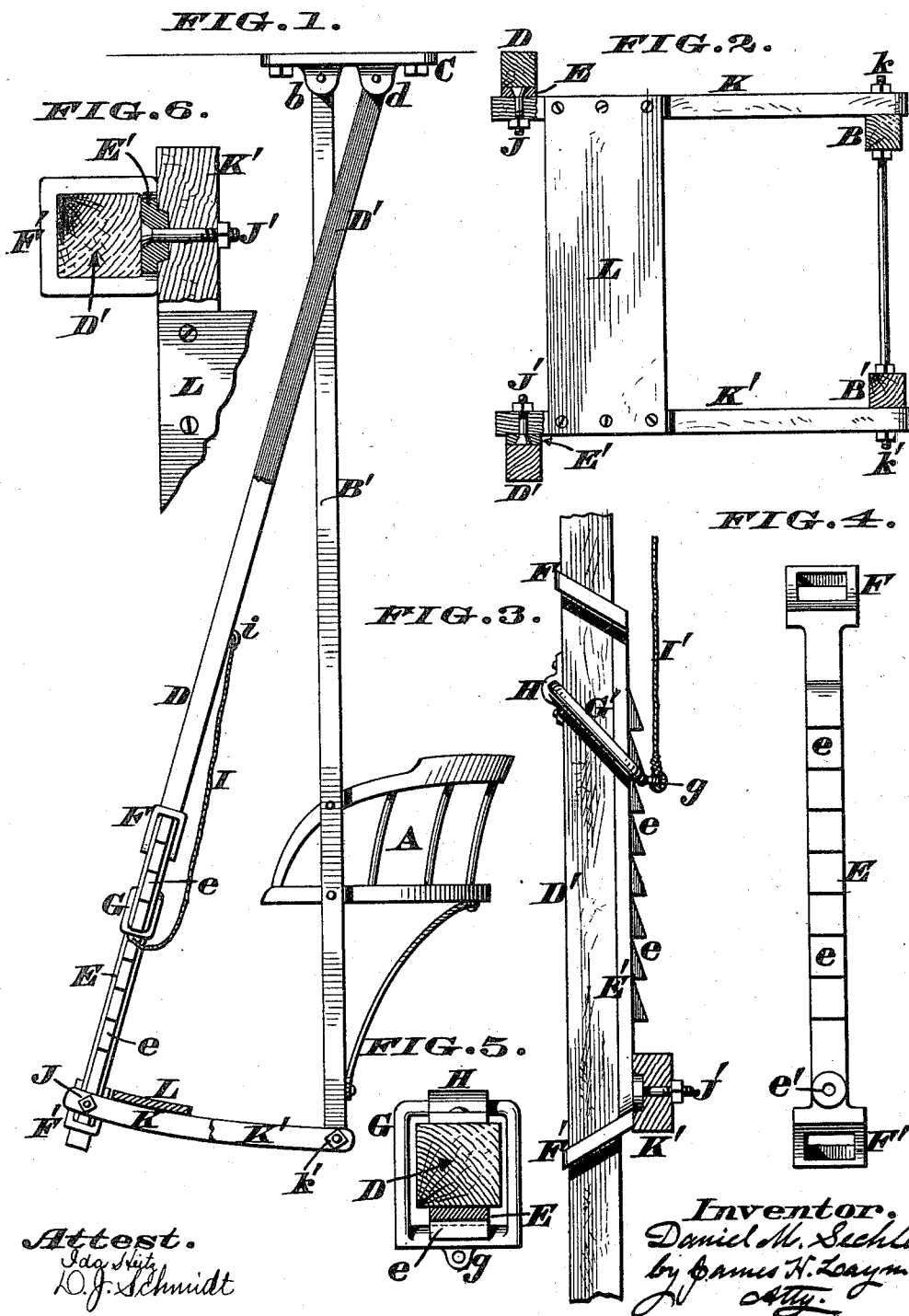


(No Model)

D. M. SECHLER.  
SWING.

No. 585,364.

Patented June 29, 1897.



# UNITED STATES PATENT OFFICE.

DANIEL M. SECHLER, OF CINCINNATI, OHIO.

## SWING.

SPECIFICATION forming part of Letters Patent No. 585,364, dated June 29, 1897.

Application filed March 5, 1897. Serial No. 626,126. (No model.)

*To all whom it may concern:*

Be it known that I, DANIEL M. SECHLER, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Swings; and I do hereby declare the following to be a full, clear, and exact description of the invention, reference being had to the annexed drawings, which form a part of this specification.

This invention relates to those swings whose backward motion is produced by the occupant of the seat bearing down on a foot-board or treadle; and my improvement comprises a ratchet attachment which enables the rider to raise or lower the front or free edge of said foot-board and without compelling him to leave the seat or stop the swing. Consequently the position of the foot-board with reference to the swing-seat can be very readily adjusted, so as to enable the rider to exercise the greatest power with the least personal inconvenience, as hereinafter more fully described.

In the annexed drawings, Figure 1 is a side elevation of a swing embodying my improvements, the lower portion of one of the foot-board supports being broken away and said board shown in section. Fig. 2 is an enlarged horizontal section of said swing, taken directly above the foot-board. Fig. 3 is an enlarged rear elevation of a ratchet-bar and a portion of its supporting-rod. Fig. 4 is an elevation of said bar detached from its rod. Fig. 5 is an enlarged horizontal section of one of the swing-rods. Fig. 6 is a similar section of said rod at the place where it is coupled to the swing-seat.

A represents a seat or chair to be occupied by a person who operates the swing, and B B' are two parallel rear rods or bars to which said seat is secured, the upper ends of these bars being pivoted at *b* to a plate or a pair of plates C. This plate is capable of being securely attached to a suitable overhead support—such, for example, as the ceiling of a hall or porch. D D' are other similar front bars or rods pivoted to said plate at *d*, these points of suspension *d* being preferably in rear of the other pivots *b*. Again, the front bars D D' are practically of the same length as the rear supporting-bars B B' and have ap-

plied to their inner or opposing sides sliding ratchet-bars E E', of which a detailed description of one will answer for both, as they are precisely alike.

Referring, therefore, to Figs. 3 and 4, it will be noticed that E' represents a straight bar or plate with ratchet-teeth *e* projecting from its inner face and having at its ends loops F F', adapted to slide freely along the bar D'. G' is a link or shackle hung in a box H, attached to the outer side of bar D' and having an eye *g*, (more clearly seen in Fig. 5,) a cord or light chain I' being carried up from this eye and fastened to said bar at *i*.

Directly above the lower loop F' the bar E' is perforated at *e'*, the perforations of the two bars being for the admission of bolts J J', (seen in Fig. 2,) and said bolts being engaged with the front ends of parallel curved rails K K', whose rear ends are coupled to the rods B B' at *k k'*.

L is a foot-board or treadle connecting the front ends of the rails K K'.

This swing is operated by the rider or occupant of seat A pressing down upon the board L with his feet, thereby producing a backward motion of the entire apparatus, and as soon as the limit of oscillation is reached the pressure is removed. The swing then oscillates forward, and by repeating the above-described operations the seat A will gradually be raised higher and higher until the full limit of the swing is reached. It may be, however, that the board L is so low that the swinger cannot bring the full pressure of his feet to bear upon it; but this difficulty can be easily remedied by placing his toes under the rear edge of said board and then swinging it up. This elevation of the free edge of the foot-board carries the ratchet-bars E E' along with it, and as soon as the proper height has been reached the shackles G G' are allowed to engage with the appropriate teeth of said bars. Consequently the foot-board is now retained at the desired elevation and without compelling the rider to leave his seat while the adjustment is being effected; but if the foot-board should be too high the rider has only to grasp the cords I I' and by pulling on said cords release the shackles G G' from the ratchet-bars E E', after which act his toes are inserted under said board, and it, together

with said ratchets E E', is allowed to descend until the proper position is reached. At this moment the shackles G G' engage with the appropriate teeth of the ratchets and thereby  
5 retain the foot-board securely in its new position.

From the above description it is evident that by providing the bars E E' with six or eight ratchet-teeth the foot-board L can be  
10 so adjusted as to be retained at a height convenient for an adult or for a child. Finally, it is preferred to make the rods D D' about square in cross-section and have the loops F F' fit snugly against them in order that the  
15 ratchets E E' may never turn around said rods.

I claim as my invention—

1. A swing provided with a seat; a pair of rear supports B, B', carrying said seat; a foot-  
20 board K K' L, applied to said supports; a pair of front supports D, D'; ratchet-bars E E' e, adjustable along said front supports, and having the free edge of said foot-board coupled to them; and shackles G G' applied to  
25 said supports D, D', and capable of being engaged with said ratchet-bars E E' e, all as herein described, and for the purpose stated.

2. The combination, in a swing, of a pair of rear supports having a seat and foot-board

applied to them; a pair of front supports pro- 30  
vided with shackles; shiftable ratchet-bars carried by said shackles; and flexible devices attached to said shackles, whereby the latter can be disengaged from their respective  
ratchets by the rider occupying said seat, all 35  
as herein described.

3. The combination, in a swing, of the non-circular support D; the shackle G swinging from said support; and the ratchet-bar E e,  
carried by said shackle; said ratchet-bar be- 40  
ing provided with integral loops F, F', that fit snugly around said support D, in the manner described, and for the purpose set forth.

4. As a new article of manufacture, an adjusting device for swing foot-boards, which 45  
device combines a metallic bar E, having upwardly-inclined ratchet-teeth e, integral non-circular loops F F'; a perforation e', near the lower loop F, and a shackle G, adapted to  
engage under said teeth, for the purpose de- 50  
scribed.

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

DANIEL M. SECILER.

Witnesses:

JAMES H. LAYMAN,  
JOHN C. ROGERS.