

G. W. SCHILLING.

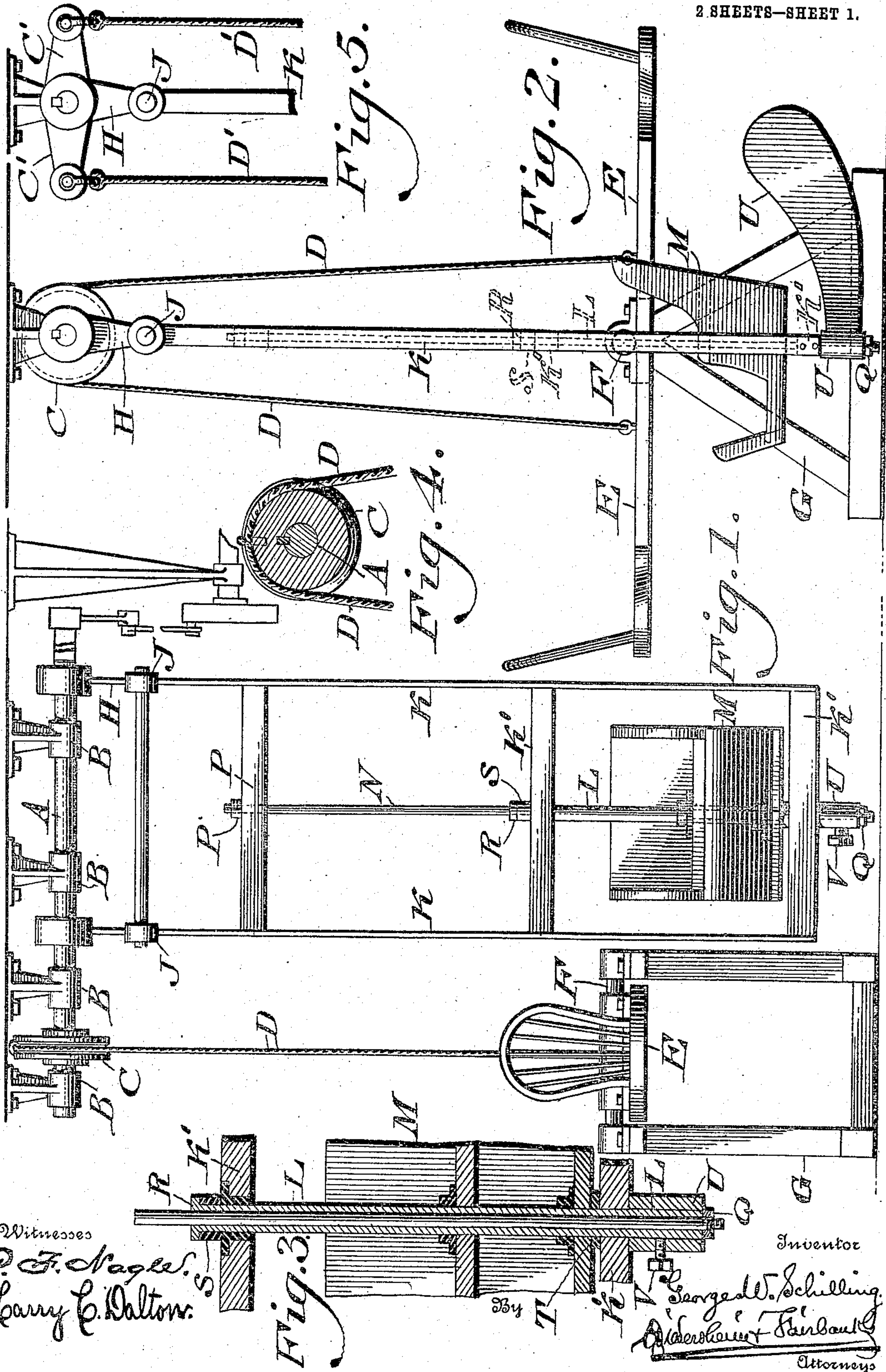
SWING.

APPLICATION FILED APR. 20, 1908.

936,818.

Patented Oct. 12, 1909.

2 SHEETS—SHEET 1.



Witnesses
O. F. Nagle.
Harry C. Dalton.

Fig. 3.

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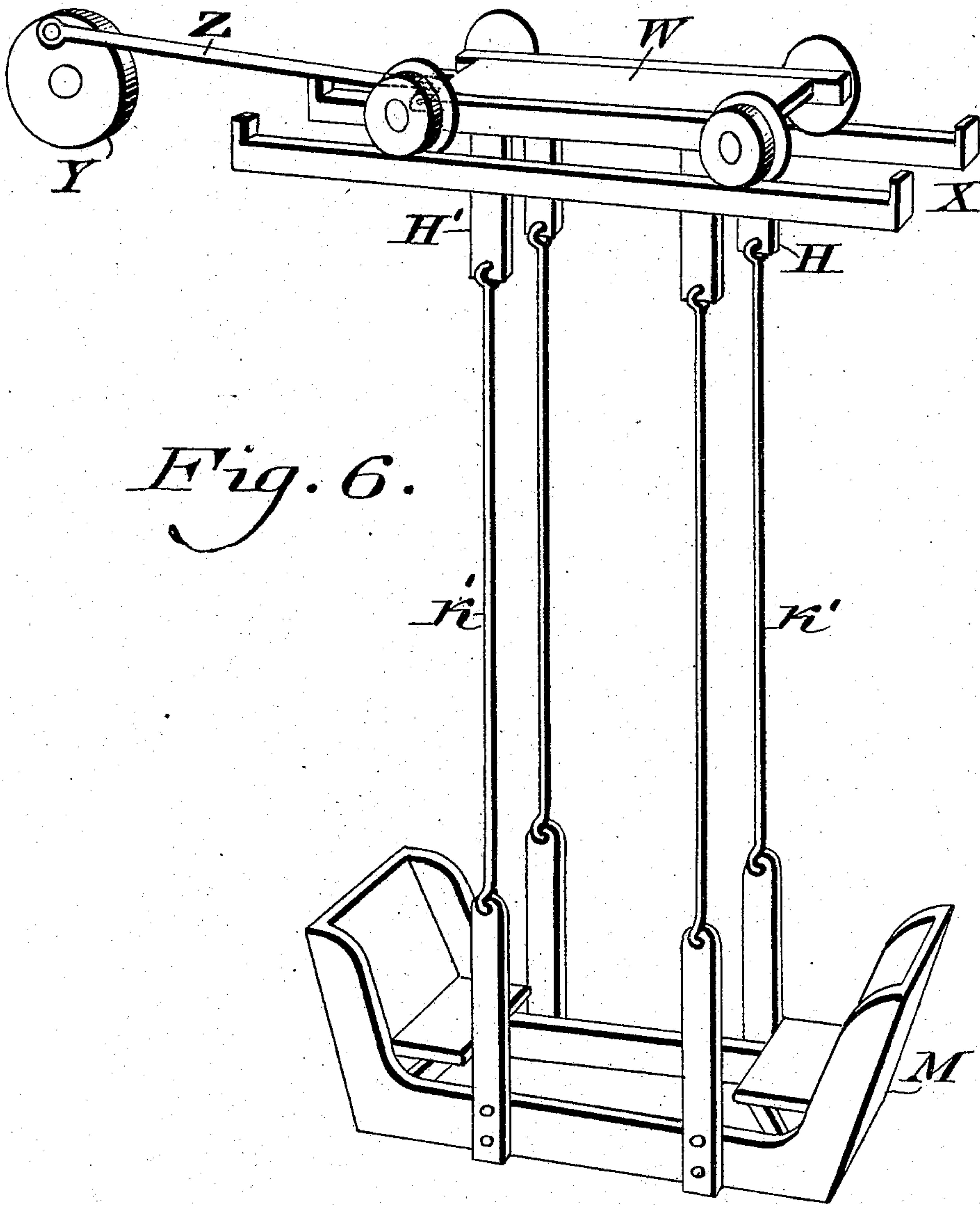
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Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE W. SCHILLING, OF PHILADELPHIA, PENNSYLVANIA.

SWING.

936,818.

Specification of Letters Patent.

Patented Oct. 12, 1909.

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To all whom it may concern:

Be it known that I, GEORGE W. SCHILLING, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Swing, of which the following is a specification.

My invention consists of a swing which may be conveniently operated through the medium of a rock shaft and crank arms depending therefrom, the frame of the car or body of the swing being pendent from said arms and pivotally connected therewith, so that said car or body receives throws in opposite directions to great extent.

It also consists of a see-saw, which may be operated by said shaft and may operate the latter, and thus impart motions to said car or body aforesaid.

It further consists in adapting the car or body of the swing to rotate as it moves to and fro in the reverse directions of the same, so that the occupant of the car may swing always with his or her face to the front, and not backward.

It also consists of details of construction, as will be hereinafter described.

For the purpose of explaining my invention, the accompanying drawing illustrates a satisfactory reduction of the same to practice, but the important instrumentalities thereof may be varied, and so it is to be understood that the invention is not limited to the specific arrangement and organization shown and described.

Figure 1 represents a front view of a swing embodying the invention. Fig. 2 represents a side elevation thereof. Fig. 3 represents a vertical section through the car or body of the swing and adjacent parts, on an enlarged scale. Fig. 4 represents a vertical section of a detached portion. Fig. 5 represents a side elevation of a modification. Fig. 6 represents a perspective view of a modification.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawing:—A designates a rock shaft, which is mounted in the bearings B, which are secured to a ceiling or elsewhere, said rock shaft, if desired, being adapted to receive motion from any suitable power, a form of mechanism therefor being shown at the right side of Fig. 1. On the shaft A is the pulley C, around which is passed the rope or chain D, the ends of which

are connected with opposite portions of the see-saw E, the latter having its axis F mounted on the stand G, which is supported on a floor, the ground or elsewhere.

Connected with and depending from the rock shaft A, are the crank arms H, with which are pivotally connected as at J the swinging frame K, which depends from said arms, and has cross-bars K' in which are mounted the vertically arranged rotatable sleeve L, which passes through the car or seat M of the swing, and is firmly secured thereto.

N designates a rod, which passes through the sleeve L, and has its upper end secured to the cross-bar P of the frame K by the nut P' or other suitable means, its lower end being provided with a nut Q, which freely engages with the adjacent end of the sleeve L, while, however, permitting said sleeve to rotate on said rod. The upper end of said sleeve has a flange R, which rests freely on the bushing S for the portion of the rod that passes through the upper cross-bar K'.

Interposed between the bottom of the car M and lower cross-bar K', is the washer T, for evident purposes.

On the lower end of the sleeve L is the blade or tail U, the same having a hub which is secured to said sleeve by the bolt or screw V or other suitable means, it being evident that when the car or seat is swung in one direction to full extent and then begins to return in the other direction, said blade describes a half circle, for a purpose to be hereinafter explained.

It will be seen that the see-saw may be operated by the occupants thereof, thus causing the ropes or chains D to rotate the pulley C and rock the shaft A in reversed directions. These motions are communicated to the crank arms H to a short extent, and thus the frame K receives throws to and fro to great extent and effectively swinging the seat. When the frame K has reached its throw in one direction, and starts to return, the blade or tail U turns, owing to its action on the air, and carries with it the seat M, so that the latter faces to what may be termed the front, and swinging backward is prevented. Then the frame describes its full motion, and when it begins its return, the blade again changes direction, and the seat follows the same, and so the operations of the car turning to the front are repeated.

In Fig. 5, I show crank arms C' in lieu

of the pulley C, and attach the cords or chains D' to said arms without producing different results.

In Fig. 6, the seat is connected with a frame or carrier K', which is connected with and pivotally pendent from the arms H' the latter being connected with the truck W, whose wheels run on the track X, which is suitably supported overhead, said truck receiving motions to and fro from the crank wheel Y and connecting rod Z, the effect of which is evident.

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

1. In a swing, a rock shaft, means for operating the same, a crank arm connected therewith, an automatically-reversible seat, and a frame carrying the latter, said frame being pivotally connected with said crank arm and pendent therefrom.

2. In a swing, a seat, a swinging frame carrying the latter, means for mechanically operating said frame, and a vertically extending rod connected with said frame, said seat being automatically-reversibly mounted on said rod.

3. In a swing, a seat, a swinging frame carrying the latter, means for mechanically operating said frame, a vertically extending rod connected with said frame, and a rotatable sleeve encircling said rod, said seat being fixed to said sleeve.

4. In a swing, a seat, a swinging frame carrying the latter, means for mechanically operating said frame, a vertically extending rod connected with said frame, a rotatable sleeve encircling said rod, said seat being fixed to said sleeve, and a wind-actuated blade which is secured to said sleeve.

5. In a swing, a seat, a carrying frame therefor, and means for automatically reversing said seat in the opposite swinging directions of said frame.

6. In a swing, a seat, a swinging carrier therefor, means for mounting said seat on said carrier, and a wind-actuated device con-

nected with said means for causing the reversal of the seat in the opposite swinging motions of said carrier.

7. In a swing, a seat, a swinging frame carrying the latter, a member on said frame adapted to carry said seat, a sleeve rotatably mounted on said member and having said seat rigidly connected therewith, and a wind-actuated device connected with said sleeve adapted to automatically rotate the same in the opposite swinging directions of said frame and place the seat faced to the front in both directions.

8. As a new article of manufacture, a see-saw, a rock shaft, a swing suspended from the rock shaft, and connections between the see-saw and the rock shaft whereby movement of the see-saw operates the swing and vice versa.

9. In a swing, a see-saw, a rock shaft, a swing suspended from the rock shaft, said see-saw being mounted on an independent axis, and connections between said see-saw and rock shaft whereby movement of the see-saw operates the swing and vice versa.

10. In a swing, a seat, a swinging frame carrying the same, a rock shaft from which said frame is pendent, a see-saw, a connection between the latter and the rock shaft, and connections between the frame and the rock shaft for operating the latter by the movement of the seat and oscillating the see-saw through the movement of said seat.

11. In a swing, a horizontal, rotatable, swinging seat, a bearing for the same, and means constructed to reverse the facing position of the seat in the opposite motions of the swing.

12. In a swing, a horizontal, rotatable, swinging seat, a bearing for the same, and a tail-vane connected with the seat to reverse its facing position in the opposite motions of the swing.

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Witnesses:

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