

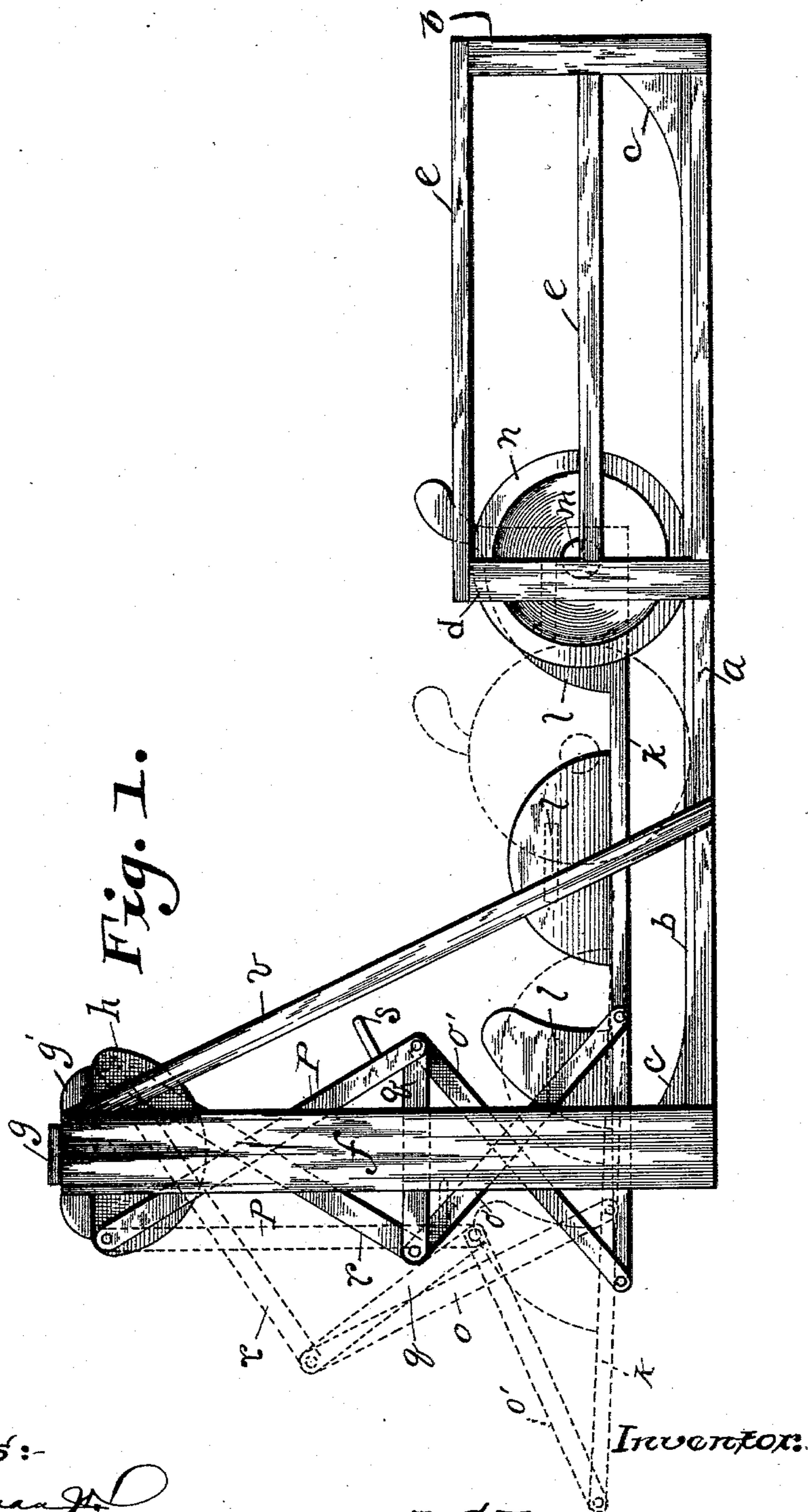
(No Model.)

2 Sheets—Sheet 1.

L. C. LEWELLYN.
WHEEL SWING.

No. 598,052.

Patented Jan. 25, 1898.



Witnesses:
A. B. Appleman
A. M. Wilson

L. C. Lewellyn.
By N. W. Co. Engr. Atty.

(No Model.)

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Fig. 3.

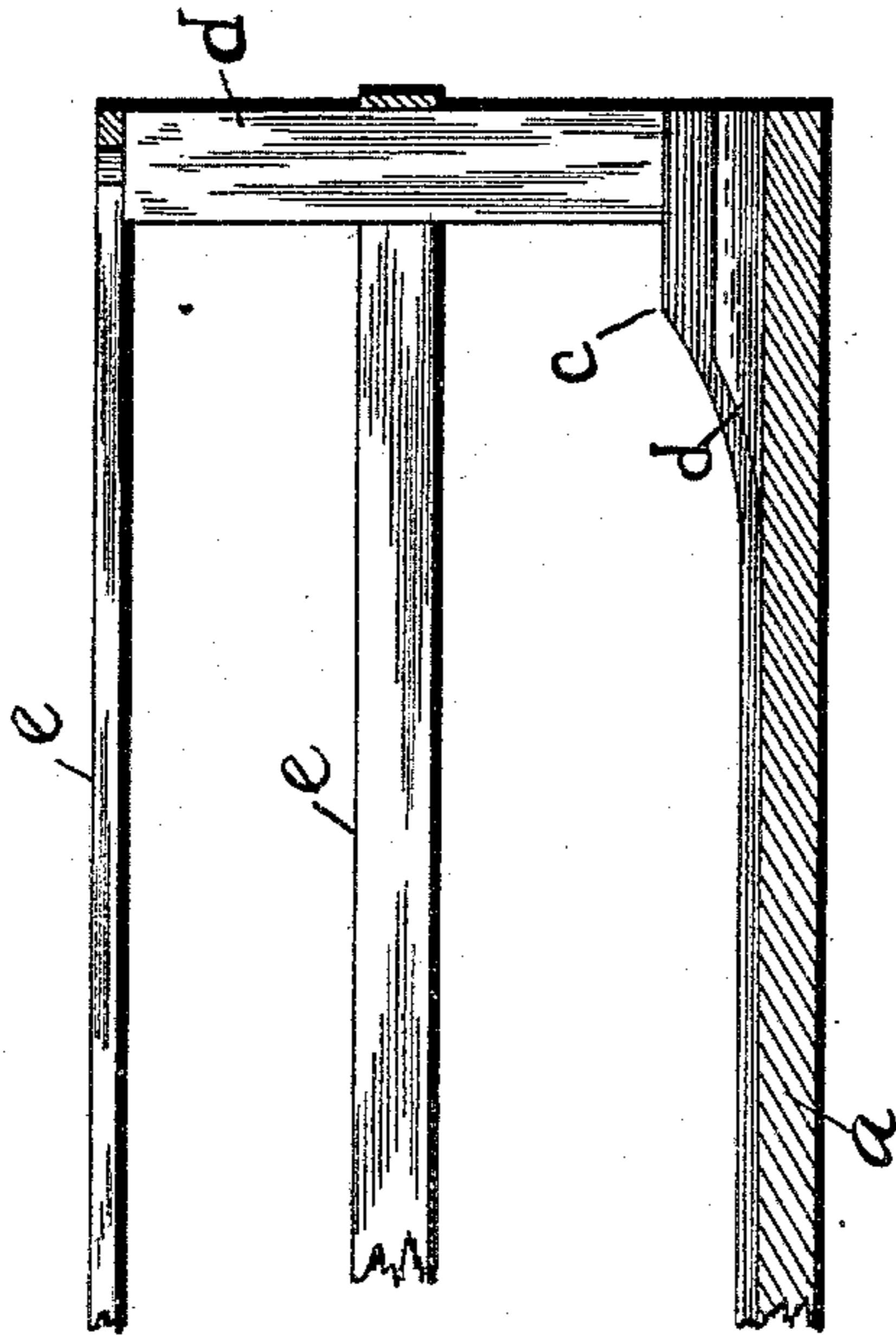


Fig. 4.

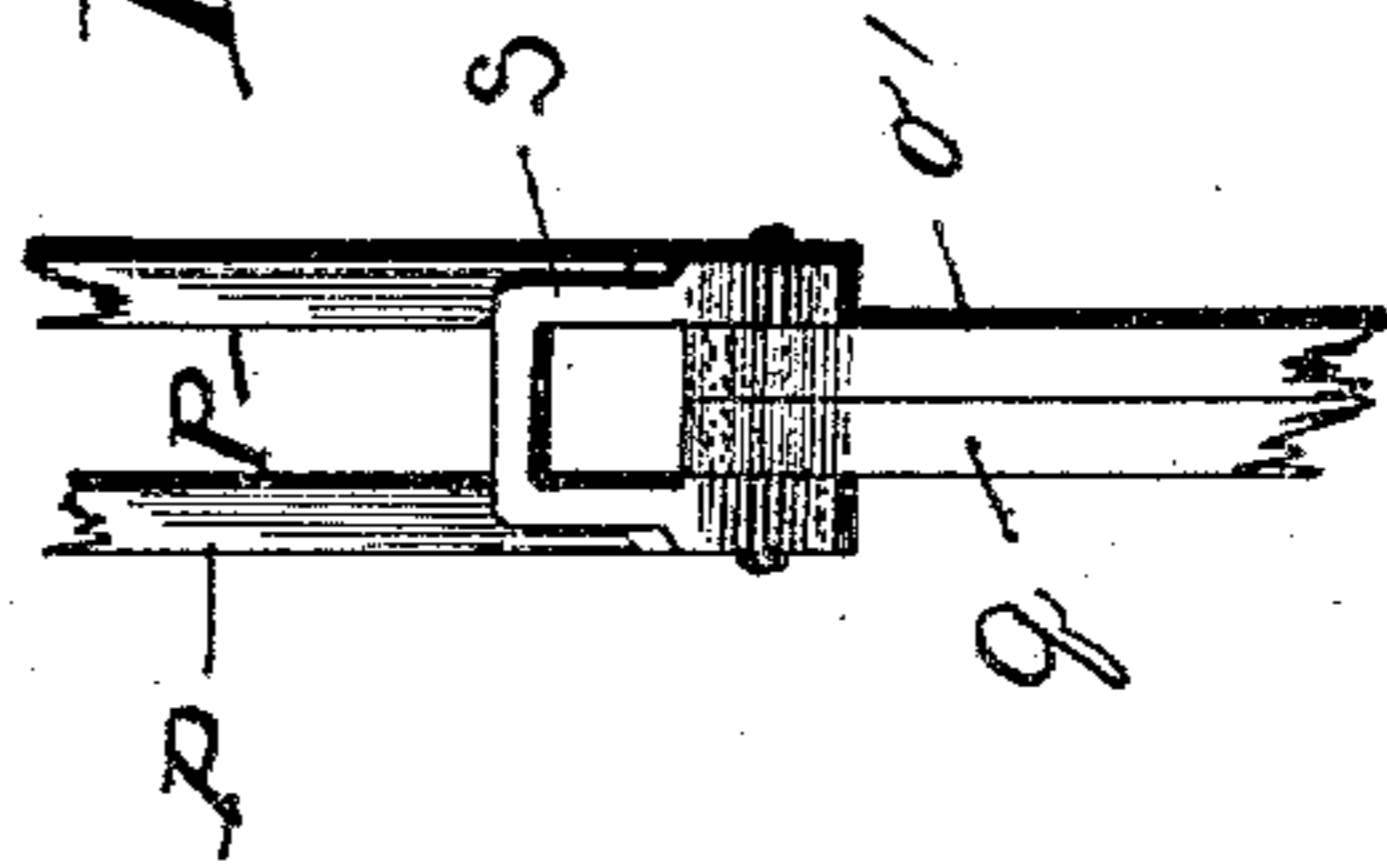
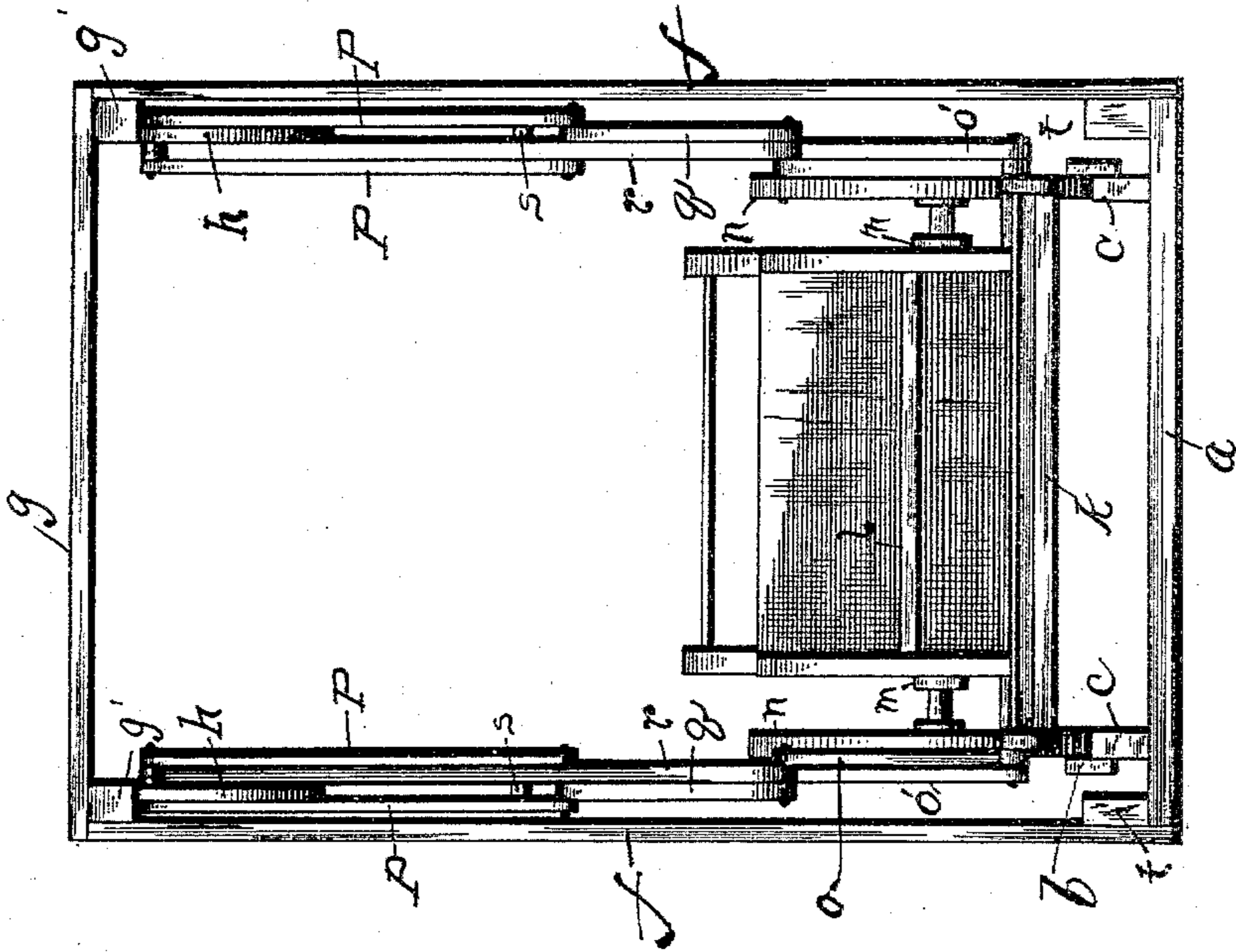


Fig. 2.



Witnesses:

A. R. Appleman

A. M. Mason.

Inventor:
L. C. Lewellyn.

By Henry C. Court, Atty.

UNITED STATES PATENT OFFICE.

LUCIEN C. LEWELLYN, OF PITTSBURG, PENNSYLVANIA.

WHEEL-SWING.

SPECIFICATION forming part of Letters Patent No. 598,052, dated January 25, 1898.

Application filed November 20, 1896. Serial No. 612,866. (No model.)

To all whom it may concern:

Be it known that I, LUCIEN C. LEWELLYN, a citizen of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Wheel-Swings, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to certain new and useful improvements in wheel-swings, and has for its object to construct a swing that will move in a practically horizontal line during the entire length of travel; and to this end the invention consists in the novel construction, combination, and arrangement of parts, to be hereinafter more specifically described, and particularly pointed out in the claims.

20 The invention further aims to construct a device of this character that may be readily adapted for house use, or, if desired, may be constructed on a more extensive scale for lawn or pleasure-ground use and the like, retaining at the same time the general form and manner of construction. Furthermore, the invention aims to construct a swing that will be extremely simple in its construction, strong, durable, effectual in its operation, and comparatively inexpensive to manufacture.

30 In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like letters of reference indicate similar parts throughout the several views, in which—

40 Figure 1 is a side elevation of my improved wheel or horizontal swing. Fig. 2 is a front view of the same. Fig. 3 is a vertical longitudinal sectional view of a portion of the bed. Fig. 4 is a rear elevation of one of the grips and a portion of the double arms.

45 Referring to the drawings by reference-letters, *a* indicates the base or bed, which forms the track, and is provided with guard-rails *b b* and raised inclined stops *c* at each end. The rear half of this bed is shown inclosed by standards *d d* and longitudinal braces *e*, forming a fence or inclosure, although this portion is not necessary for the operation of the device. On the sides of the base at the for-

ward end are attached standards *f f*, having a cross-bar *g* attached to their top, which serves to hold the same rigid. At the top of their standards *f f* and to their inner face are secured blocks *g' g'*, to which are attached segmental plates *h h*, to which the swing is pivoted. This swing, as shown, is composed of a base *k*, provided with seats *l l*, which may be of any desired form. The base is supported at the rear by an axle *m*, provided with wheels or rollers *n*, and at the forward end the base is supported by arms *o o* and *o' o'*, pivoted to the base at their lower ends. The arms *o' o'* are swiveled at their upper ends between the double arms *p p*, said double arms forming a yoke and being pivotally attached at their upper ends to the forward ends of the segment-plates. Pivotaly connected to the lower ends of the double arms *p p* and the upper ends of the arms *o' o'* are braces *q q*, serving to hold the ends of said arms together. The arms *o o* are pivotally attached at their upper ends to a brace *q* and to the lower end of an arm *r*, operating between the double arms *p p*, said arm *r* being pivoted at its upper end to the rear end of the segmental plates *h*. The double arms *p p* are provided near their lower ends with the grips *s s*, which may be used as handholds, or a strap or cord may be attached to the same to actuate the swing, if desired. In the drawings I have shown stiffening-blocks *t t*, secured to the base *a* and against the inner face of the standards, and I have also provided stiffening-braces *v v*, attached to the base *a* and to the standards *f*.

50 The operation of my improved swing will be readily apparent from the views of the same that I have shown in the drawings; but for the purpose of illustrating the same more clearly to those unskilled in the art we will assume that the parts have all been secured in their respective positions and the person or persons desiring to ride have assumed their positions on any of the seats. The occupant grasps the grips *s s*, and by pulling down on the same causes the series of pivoted arms to propel the carriage forward in the position shown in dotted lines, which, as observed, is slightly above the horizontal line occupied by the carriage while in the stationary position or while the carriage is in the position shown in full lines in Fig. 1. When the carriage

has reached its full forward path of travel, the movement given to the same and the slight incline which the carriage has assumed will serve to return the same to the extreme
 5 end of the bed or track, the rollers *n* also assisting in this return movement at each end by reason of their engaging the inclined stops *c c*. It will thus be observed that after the carriage has been once set in motion the
 10 momentum of each movement and the movement of the person or persons in the carriage will prove sufficient to actuate the carriage in the continuous forward and backward movement, while if a quicker movement is
 15 desired the pull on the grips will propel the carriage forward with greater speed, and this naturally serves to return the same more rapidly. It will be observed that by this construction the carriage while receiving a swing-
 20 ing motion still retains practically a horizontal plane, reducing the danger from a fall, as is occasioned by the ordinary swings which move in a semicircle.

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

1. A swing consisting of a base, forming a track, standards carried by said base, a cross-bar secured to, said standards, plates carried
 30 by said cross-bar, a series of arms pivotally attached to the plates and to the carriage at their lower ends said carriage supported at the rear by rollers, traveling on said track, substantially as shown and described.

35 2. In a swing a base forming a track, a carriage, rollers supporting the rear of said carriage, standards secured to the base, cross-bars secured to said standards, a series of pivoted arms supporting the front of the
 40 carriage and pivoted to said cross-bars and adapted to impart a traveling motion to said carriage, substantially as shown and described.

45 3. In a swing, a carriage operating in a practically horizontal line, rollers supporting

the rear of said carriage, a base forming a track, standards secured to said base, a cross-bar carried by said standards segment-plates secured to said cross-bar near the top of said standards and a series of pivoted swinging
 50 arms attached to said plates and to the carriage, to impart a traveling motion thereto, substantially as shown and described.

4. In a swing having a carriage adapted to move in a horizontal line, a base forming a
 55 track, standards secured to said base, a cross-bar carried by said standards segment-plates secured to said cross-bar carried by said standards, a series of arms pivotally attached to the plates and to the carriage to impart
 60 motion thereto, rollers supporting the rear of said carriage and inclines arranged on the track to receive the rollers and reverse the motion of the carriage, substantially as shown and described.

65 5. In a swing, a base forming a track, a carriage moving horizontally on said track, standards secured to said base, a cross-bar securing said standards together, a series of
 70 arms pivotally secured to the cross-bar and to the carriage, rollers supporting the rear of said carriage, and means for imparting motion to the carriage, substantially as shown and described.

75 6. In a swing, a base, inclined tracks on said base, a carriage moving horizontally on said track, standards supported by said base a cross-bar carried by said standards, a series of pivoted arms secured to the cross-bar and supporting the front of the carriage, rollers
 80 supporting the rear of said carriage, and means for operating the arms to impart a substantially horizontal motion to the carriage, substantially as shown and described.

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

LUCIEN C. LEWELLYN.

Witnesses:

ALFRED M. WILSON,
 HENRY C. EVERT.