

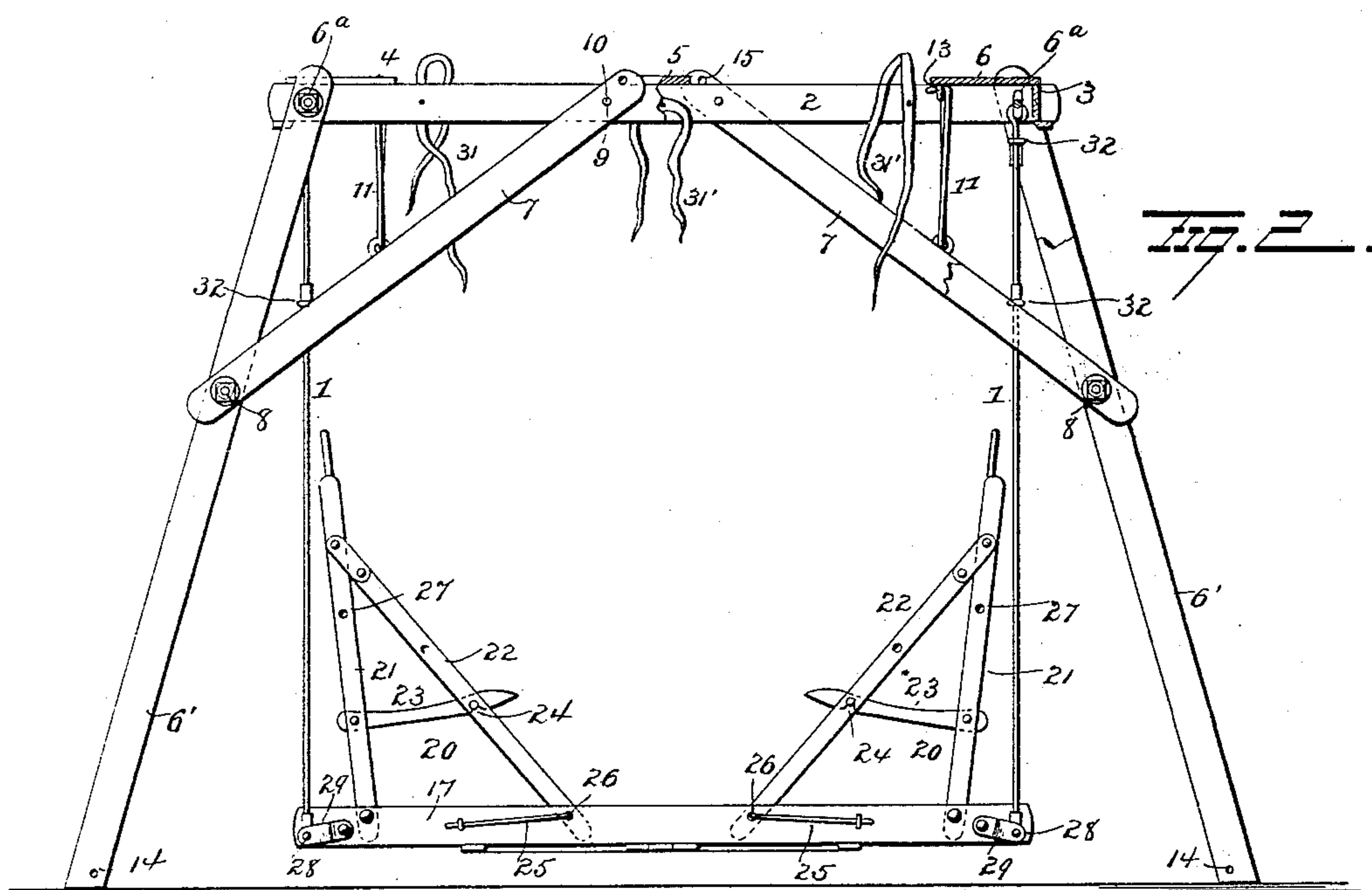
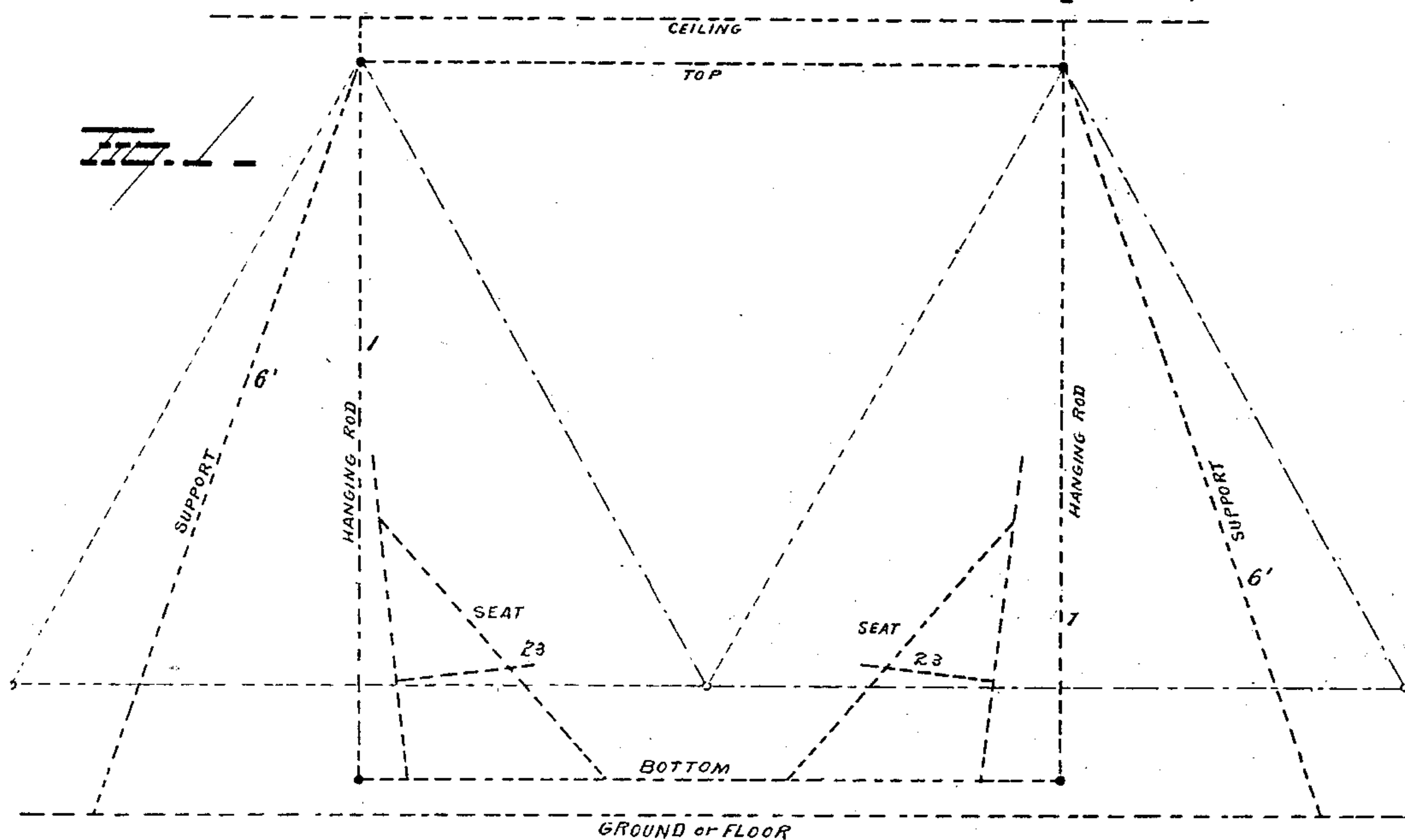
(No Model.)

3 Sheets—Sheet 1.

J. G. J. DAVIS.  
SWING.

No. 602,432.

Patented Apr. 19, 1898.



WITNESSES  
E. J. Nottingham  
G. F. Downing.

INVENTOR  
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By H. A. Seymour  
Attorney

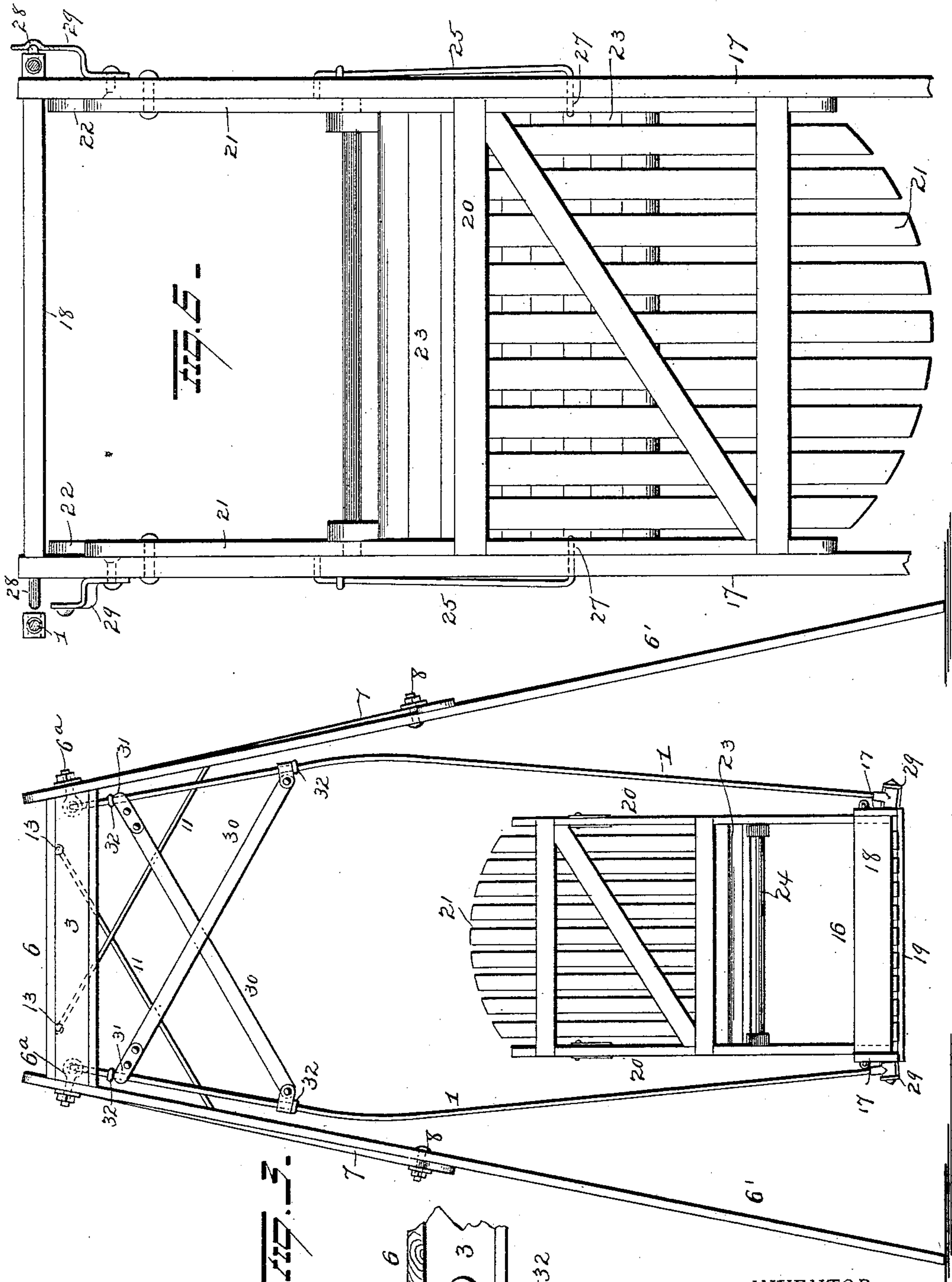
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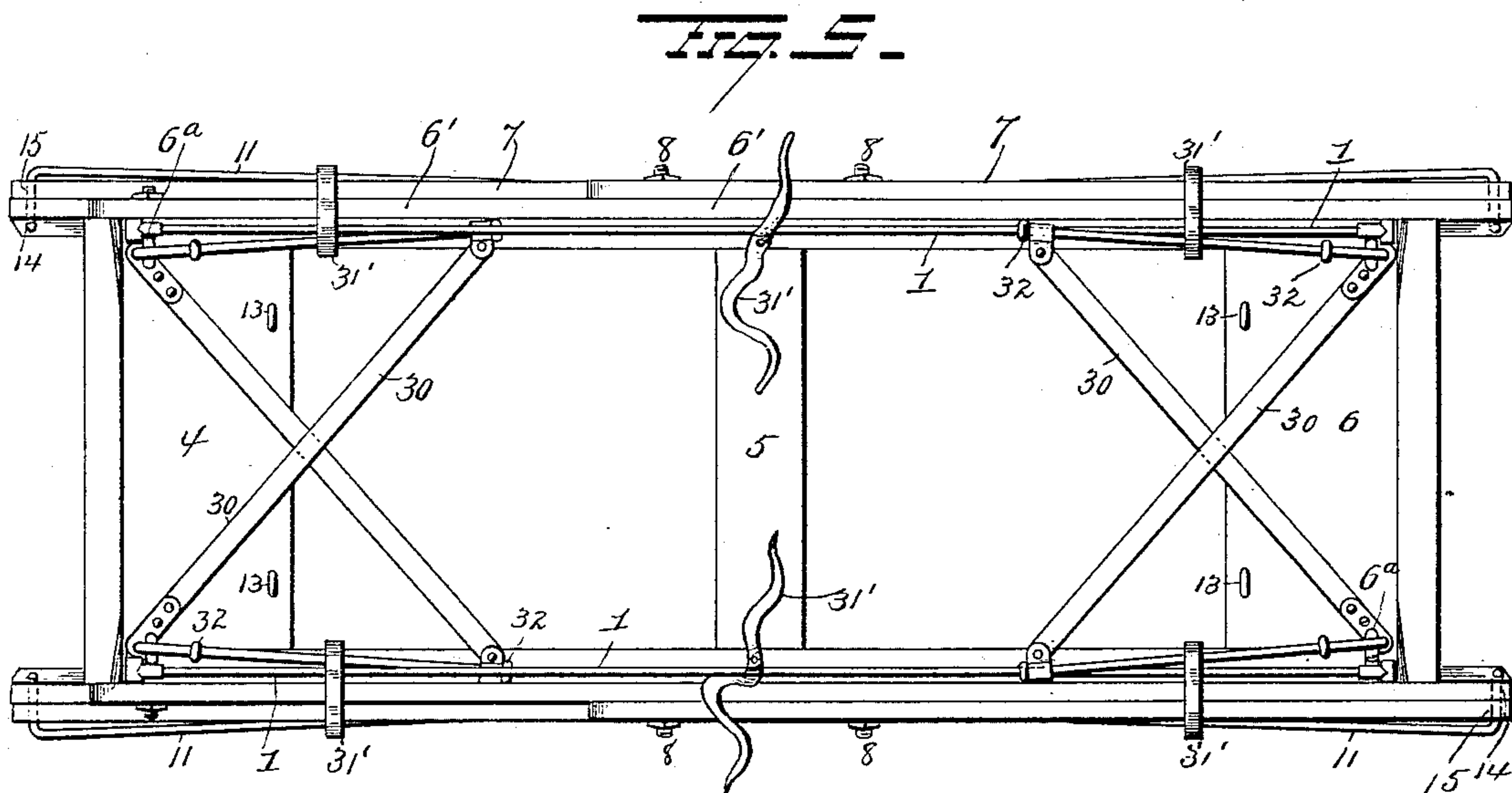
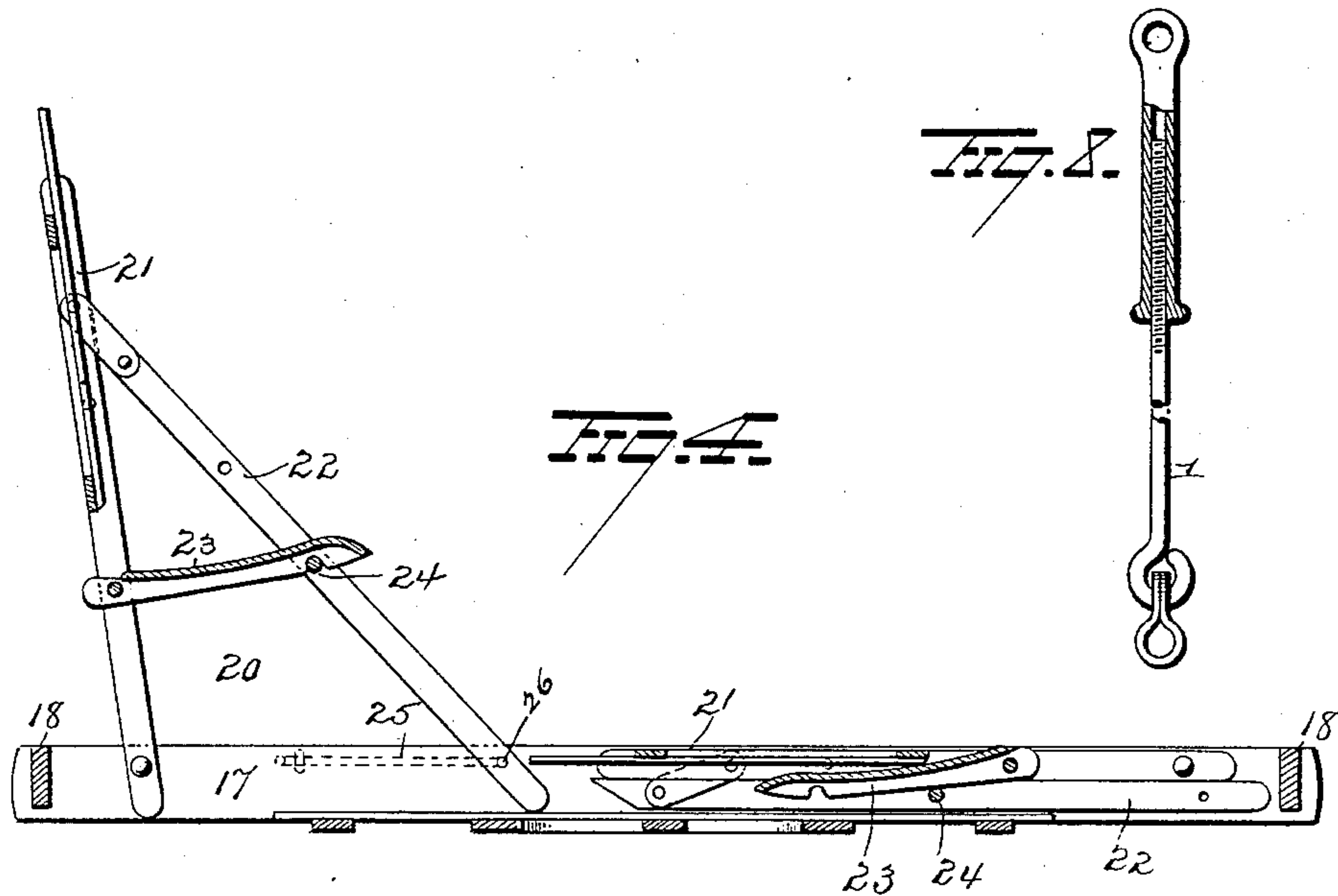
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# UNITED STATES PATENT OFFICE.

JOHN GADDY JONES DAVIS, OF AUGUSTA, GEORGIA.

## SWING.

SPECIFICATION forming part of Letters Patent No. 602,432, dated April 19, 1898.

Application filed August 28, 1897. Serial No. 649,845. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN GADDY JONES DAVIS, a resident of Augusta, in the county of Richmond and State of Georgia, 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, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in swings; and it consists in certain novel features of construction and combinations of parts, which will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a diagrammatical view showing the general arrangement and proportions of the various parts. Fig. 2 is a view of my preferred form of swing and swing frame or support, parts being broken away to show the interior construction. Fig. 3 is an end elevation. Fig. 4 is a detached view of the bottom, showing one of the seats elevated and the other folded. Fig. 5 is a view showing the parts of the frame folded. Fig. 6 is a plan view of one end. Fig. 7 is a detail in section, and Fig. 8 is a modified view of hanging rod.

The numerals 1 1 1 1 represent four hanging-rods. These hanging-rods may be differently constructed and differently supported, the main consideration being that they be pivoted in pairs a distance apart approximately equal to the length of the rods, so that the rods, the distance between their points of support, and the swing-bottom form a square, for reasons which will be hereinafter more fully explained. The attachment of the rods may be from the ceiling of a room or porch or from the top of a specially-erected framework, either stationary or portable, as the case may be. As the form preferred and most elaborately illustrated is folding and portable, a description in detail will now follow: The top of the frame comprises a rectangular frame composed of side strips 2 2 and end strips 3 3, as well as two or three boards 4, 5, and 6, secured across the top to brace and make it rigid. The strips 2 and 3 are preferably disposed upon a slight incline, and especially the side strips 2 2, as shown in Fig. 3, the purpose of which will readily appear.

The four supports or legs 6' 6' 6' 6' are pivoted at their upper ends to these side strips by means of eyebolts 6<sup>a</sup> 6<sup>a</sup>, and by virtue of their slight inclination the legs or supports spread out laterally at their lower ends to afford a wide base and prevent the overturning of the structure. These legs or supports are also spread or extended outwardly at the ends, in which position they are held by the side braces 7 7. These side braces are pivoted to the legs or supports at the points 8 8, and their opposite or free ends are each furnished with a hole 9, adapted to detachably receive a pin or stud 10, projecting outwardly from the side strip 2. Pivotaly connected with each of these side braces 7 7 is a brace-hook 11, and the latter is adapted to be hooked from the outside into an eye or loop 13 13, depending from the lower surface of the end boards 4 and 6. It will be observed that the length of the side braces 7 7 is preferably equal to the length of the legs or supports from the pivotal points 8 8 of the braces to the lower ends of the legs and that the length of the brace-hooks 11 11 is equal to the distance between their point of connection with the side braces and the detachable ends of the latter, the object of these exact proportions being to effect a ready folding and fastening of the parts when the frame is knocked down, the hook 12 at the extreme end of the brace-hook then being adapted to swing around and enter holes 14 and 15 in the extreme ends, respectively, of the legs 6 6 and side braces 7 7, whereby to lock these parts together. As these legs and braces are all alike this description will suffice for all. So much, then, for the portable folding frame.

The seats may be rigid or arranged to fold. As illustrated, I prefer that they should fold. A platform or bottom 16 is provided. It consists of the side and end strips 17 17 and 18 18, respectively, and has a floor 19, preferably of slats. There are two chairs 20 20 shown, one located at either end of the platform and facing each other. These seats may be variously constructed, but preferably consist of the backs 21 21, the lower ends or legs of which are hinged to the sides 17 17 of the platforms, the arms 22 22, hinged to the backs and detachably connected at their lower ends to the slides 17 17, and the seats 23 23, hinged



to the rear legs and adapted to rest at their free ends on the cross-bar 24. A spring catch-hook 25 is located in position to spring into holes 26 26 in the lower ends of the arms 5 22 22 to hold the seats in their elevated positions or into holes 27 27 in the backs 21 or arms 22 to lock the seats in their folded or knockdown position.

The hanging-rods 1 1 are preferably suspended from the eyebolts 6<sup>a</sup> 6<sup>a</sup> and are each furnished with loops at their lower ends to detachably receive pins 28 28 on the sides of the platform, pivoted keepers 29 29 being provided to hold the ends of these rods on the 15 pins 28 28. To prevent lateral swinging of the platform, braces 30 30 are employed, they having sliding hinged connection with each hanging rod, the free ends of these rod-braces being constructed, as at 31, to straddle and be 20 detachably connected with the rods, the projections 32 32 on the hanging-rods limiting their sliding movement. As a modification of these rods, the construction shown in Fig. 8 is used, in which the rods are made exten- 25 sible to regulate their length, as occasion frequently requires that the length of one or more of these rods be changed or varied to insure the accurate hang and swing of the platform. Also the loops on the lower ends 30 of these rods are pivotally connected thereto, so that the loops can be easily and quickly adjusted to receive the pins 28 28 on the platforms.

The apparatus, as explained, may be fixed 35 or portable; also, it may be made in different sizes, and it may be knockdown or rigid. In any event, owing to the square formation of the swinging part, the swing vibrates smoothly and evenly and is maintained in a 40 level position and close to the ground. There is consequently no jolting, jerking, or tilting, and hence persons who are made sick by the motion of ordinary swings find this most comfortable and pleasant. It is operated by a 45 very slight movement of the body back and forth or by a pulling at the hanging-rods.

For children these swings can be made small and portable without the necessity of folding, as they can then be picked up and 50 moved from place to place with ease. At the same time they are perfectly safe, as the platform is always so near the ground, and the extent of vibration is always confined within certain bounds by the brace-hooks.

55 It is hardly necessary to describe the manner of knocking down or setting up the frame, as it has been alluded to in the body of the description and as it is quite evident from the construction as disclosed in the drawings. It 60 may be added, however, in a very general

way, that the legs or standards, with their braces, may be folded alongside the top of the frame and the hanging-rods and their braces under the top, and all these parts are then fastened, conveniently, by the straps 31' 65 31'. The platform and seats are also folded together in like manner, and the entire device is thus made compact and portable.

It is evident that others slight changes might be made in the form and arrangement of the 70 several parts described without departing from the spirit and scope of my invention, and hence I do not wish to limit myself to the exact constructions herein set forth; but,

Having fully described my invention, what 75 I claim as new, and desire to secure by Letters Patent, is—

1. In a swing, the combination with a set of hanger-rods, and a seat supported at their lower ends, of braces connecting these hanger- 80 rods in pairs and bowing them outward between their ends whereby to afford ample clearance between the rods and the sides of the seat.

2. In a swing, the combination with a set of 85 hanger-rods pivotally suspended at their upper ends, and a seat supported by them at their lower ends, of a pair of crossed braces connecting these rods in pairs these braces having a sliding pivotal connection at one end 90 and a loose connection with the rods at the other end, and means for confining the ends of the braces in their relation to the hanging-rods whereby to spread the rods apart between their ends to clear the sides of the seats. 95

3. In a swing, the combination with hanging-rods having loops in their lower ends, of a platform having pins thereon adapted to enter the loops in the lower ends of the rods, and pivoted keepers for holding the loops 100 upon the pins, substantially as set forth.

4. In a swing, the combination with a platform or bottom, of extensible hanging-rods, loops pivotally connected therewith, pins on the platform adapted to enter these loops, 105 and means for holding the loops on the pins, substantially as set forth.

5. In a swing, the combination with a platform, of hanging-rods, and braces having a sliding pivotal connection with the rods, the 110 free ends loosely embracing the rods, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JOHN GADDY JONES DAVIS.

Witnesses:

H. C. TERMATS,  
J. M. ROY.