

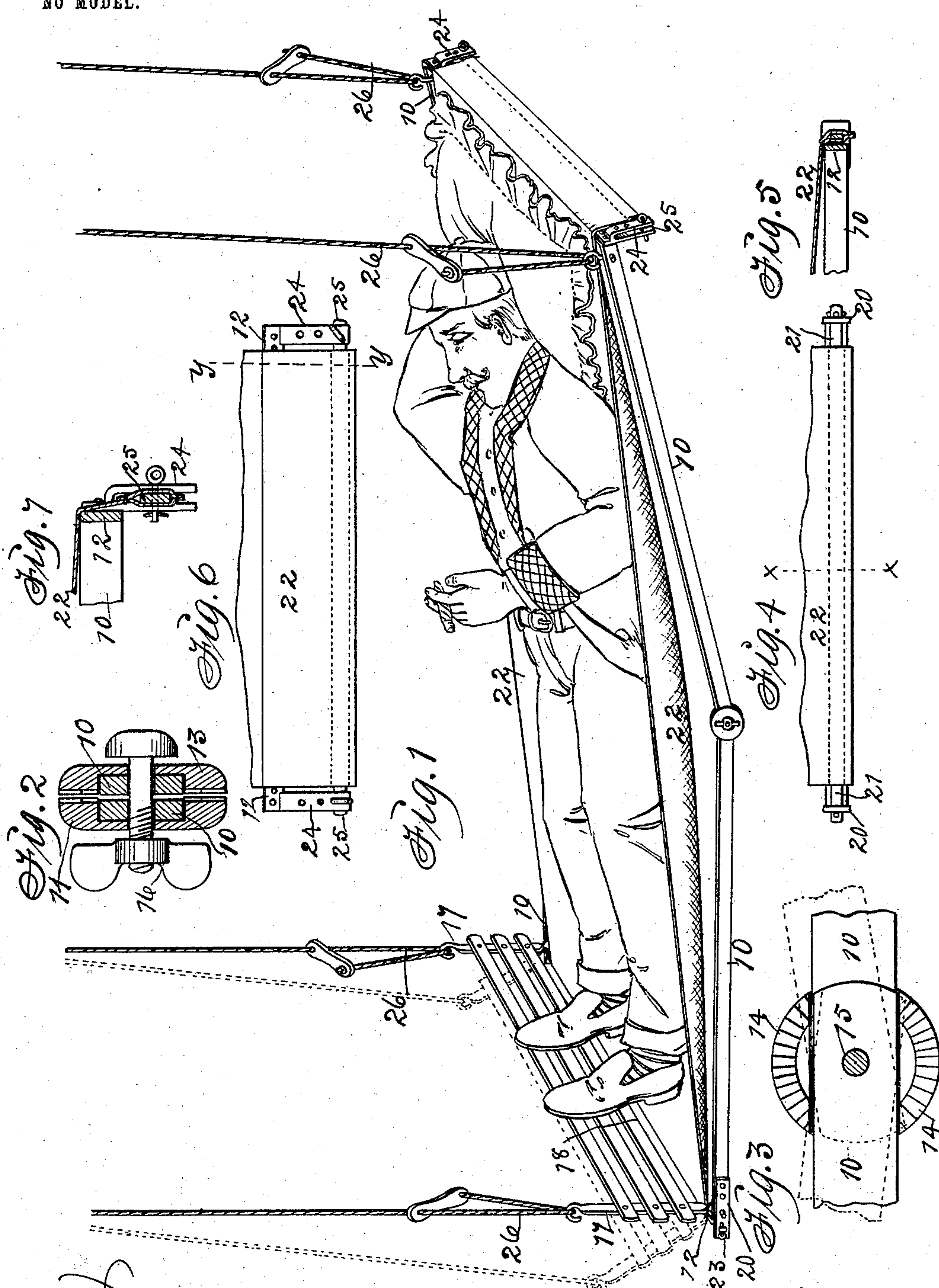
No. 743,524.

PATENTED NOV. 10, 1903.

G. E. KNOWLTON.
SWING.

APPLICATION FILED DEC. 20, 1902.

NO MODEL.



Witnesses:
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UNITED STATES PATENT OFFICE.

GERRY E. KNOWLTON, OF BOONE, IOWA.

SWING.

SPECIFICATION forming part of Letters Patent No. 743,524, dated November 10, 1903.

Application filed December 20, 1902. Serial No. 136,085. (No model.)

To all whom it may concern:

Be it known that I, GERRY E. KNOWLTON, a citizen of the United States, residing at Boone, in the county of Boone and State of Iowa, have invented a new and useful Swing, of which the following is a specification.

My object is to provide a swing adapted to be suspended by means of ropes or chains detachably and adjustably connected with the corners and an overhead support in such a manner that a person can recline on the swing like on a hammock and impart longitudinal motion to the swing by foot-pressure and also adapted to be adjusted so the head end can be readily raised to support a person's head and shoulders elevated and inclined relative to a horizontal plane at any angle desired or supported and swung when desired in a sitting posture.

My invention consists in the construction, arrangement, and combination of parts, as hereinafter set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view that shows the swing in position as required for practical use and a person reclining thereon with his feet against a foot-rest as required for imparting motion to the swing by foot-pressure. Fig. 2 is an enlarged transverse sectional view of the joint of one of the sides of the frame and shows how the overlapping ends of the side bars are pivotally and adjustably connected by means of clamps. Fig. 3 is a detail view that shows a ratchet at the circumference of one of the clamping-disks that are used for pivotally connecting the inner ends of the mating parts of each side of the frame. Fig. 4 is a top view of the foot end of the frame that shows how a canvas is detachably fastened to the end of the frame. Fig. 5 is a transverse sectional view on the line *xx* of Fig. 4. Fig. 6 is a face view of the head end of the swing and shows how a canvas is detachably fastened thereto and adjusted as required to regulate the tension of the canvas when stretched relative to the rigid frame. Fig. 7 is a transverse sectional view on the line *yy* of Fig. 6.

Each end portion of the jointed frame is composed of straight side bars 10, preferably metal, that are rigidly connected at their

outer ends by transverse bars 12, fixed thereto, or they may be integral therewith and each end portion of the jointed frame produced by bending the ends of a straight bar at right angles to the central portion and into parallel position with each other. The inner ends of the bars 10 are perforated and adjustably connected by means of mating disks 13 and 14, that have recesses in their inside faces to admit the bars and ratchet-teeth at their circumferences, so that when the ends of the bars are placed in overlapping position, as shown in Figs. 2 and 3, they can be readily pivotally connected by means of screw-bolts 15 and nuts 16 and the bars adjusted to extend at different angles relative to each other and also clamped together as required to make the joints and the frame rigid.

A foot-rest composed of hinge-irons 17, provided with hooks at their top ends and a plurality of wooden slats 18 fixed thereto, is pivotally connected with the end portions of the parallel bars 10 of the foot end of the frame by means of journals 19, that extend from the lower ends of the hinge-irons 17 through perforations in the said parallel parts of the frame or in any suitable way to produce a hinged connection that will allow the foot-rest to project outward and adapted to be pressed outward, as indicated by dotted lines in Fig. 1, so that a swinging motion can be imparted to the swing by the foot-pressure of a person on the swing when suspended by means of ropes attached to the corners of the head end of the frame and the hooks at the ends of the hinge-irons 17.

Extensions 20, fixed to the outside of the foot ends of the bars 10, and a bar or rod 21, extended through apertures in the extensions, serve as a means for detachably fastening a canvas 22 to the foot end of the frame by simply doubling the end of the canvas and stitching it together to produce an open-ended pocket through which the rod or bar 21 can be passed and then fastened in its place by means of keys 23 or in any suitable way. To adjustably fix the canvas 22 to the head end of the frame, bifurcated brackets 24 are fixed to the corners to project downward and provided with pin-holes, so that a bar 25 can be extended through an open-ended pocket

at the head end of the canvas and the ends of the bar then passed into the free open ends of the brackets and adjustably and detachably fixed to the frame, as shown in Figs. 1, 6, 5 and 7.

Ropes 26, adjustably connected with the foot-rest and the head end of the frame, as shown in Fig. 1 or in any suitable way, serve as a means for suspending the swing from 10 the ceiling of a building, the roof of a porch, a portable frame, or any suitable overhead support in such a manner that it can be raised and lowered or taken down at pleasure.

Having thus described the purpose, construction, and operation of my invention, its 15 practical utility will be readily understood by persons familiar with the use of hammocks and swings; and

What I claim as new, and desire to secure 20 by Letters Patent, is—

1. In a swing, a frame composed of two rigid parts pivotally and adjustably connected to produce joints at the central portion of the frame, means for locking the joints, a foot- 25 rest pivotally connected with the foot end of the frame and means for detachably connecting a canvas with the fixed ends of the frame, to operate in the manner set forth for the purposes stated.

2. In a swing, a frame composed of two rigid parts pivotally and adjustably connected to produce joints at the central portion of the frame, means for locking the joints, a foot- 30 rest pivotally connected with the foot end of the frame, a canvas fastened to the ends of the frame and means for lengthening and shortening the canvas, to operate in the manner set forth for the purposes stated.

3. In a swing, a frame composed of two rigid parts pivotally and adjustably connected to produce joints at the central portion of the frame, means for locking the joints, a foot- 40 rest pivotally connected with the foot end of the frame, a canvas detachably fastened to

the ends of the frame, means for adjusting 45 the canvas relative to the length of the frame, ropes fixed to the ends of the foot-rest corners and ropes fixed to the corners of the head end of the frame, arranged and combined to operate in the manner set forth for 50 the purposes stated.

4. In a swing, a frame composed of two rigid parts hinged together at their inner ends, means for adjusting the two rigid parts relative to each other, means for locking the 55 hinges to retain the two rigid parts at different inclinations relative to each other, a canvas fixed to the ends of the complete frame and means for adjusting the canvas, arranged and combined to operate in the manner set 60 forth for the purposes stated.

5. An adjustable swing comprising a frame provided with adjustable joints at the central portions of its sides, means for locking the joints, a foot-rest hinged to the foot end of 65 the frame to project upward, a canvas fixed to the ends of the frame, ropes fixed to the corners of the top of the foot-rest and ropes fixed to the corners of the head end of the frame and means for lengthening and short- 70 ening the canvas, arranged and combined to operate in the manner set forth for the purposes stated.

6. An adjustable swing comprising a frame provided with adjustable joints at the cen- 75 tral portions of its sides, means for locking the joints, a foot-rest hinged to the foot end of the frame to project upward, a flexible bottom detachably fixed to the ends of the frame, means for regulating the tension of the bot- 80 tom, ropes fixed to the corners of the foot-rest and ropes fixed to the corners of the head end of the frame, combined to operate as set forth for the purposes stated.

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Witnesses:

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