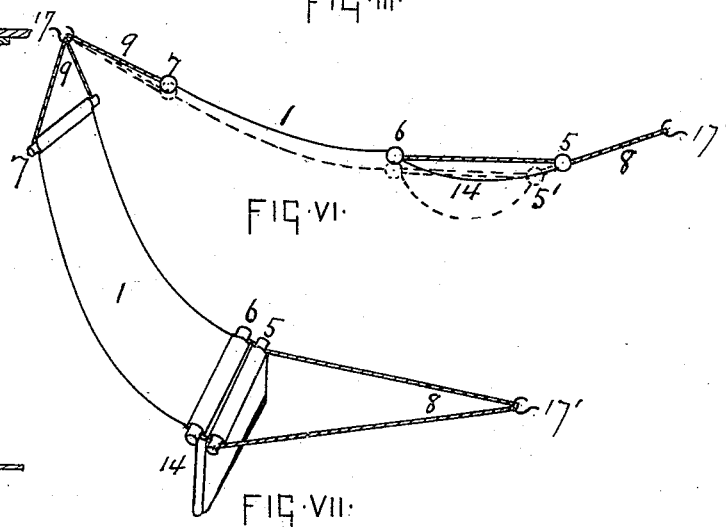
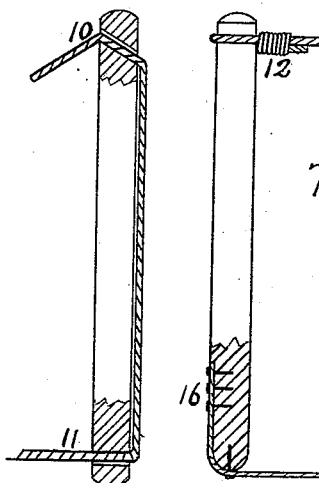
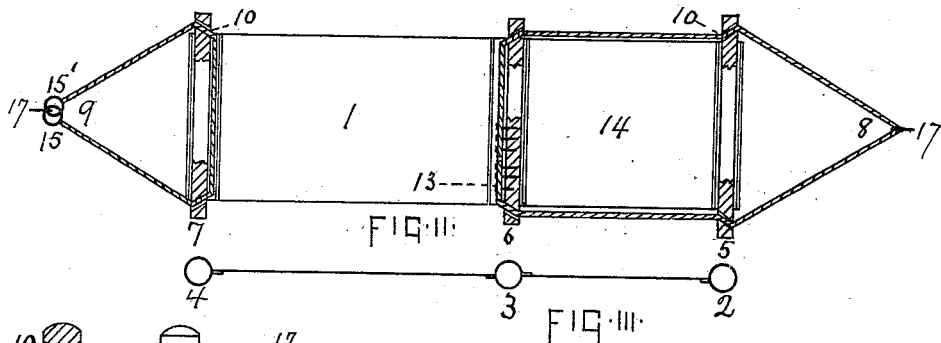
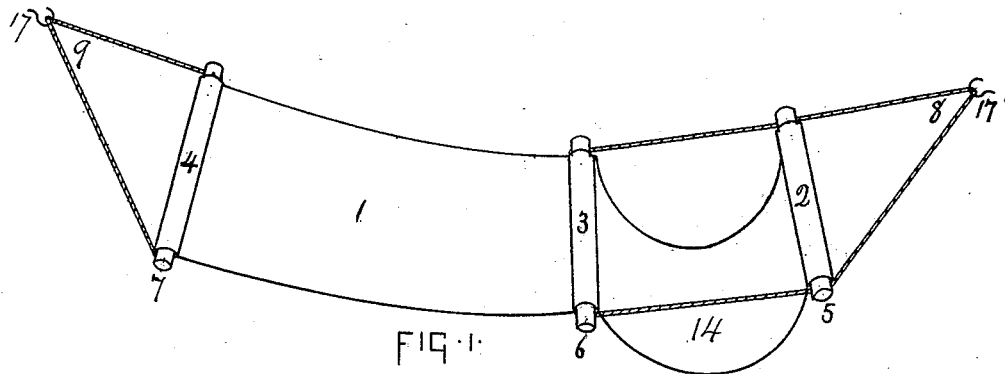


(No Model.)

S. SANDERS.  
HAMMOCK.

No. 419,361.

Patented Jan. 14, 1890.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

SIDNEY SANDERS, OF SPRINGFIELD, MASSACHUSETTS.

## HAMMOCK.

SPECIFICATION forming part of Letters Patent No. 419,361, dated January 14, 1890.

Application filed April 4, 1889. Serial No. 306,020. (No model.)

*To all whom it may concern:*

Be it known that I, SIDNEY SANDERS, a citizen of the United States, residing at Springfield, Hampden county, Massachusetts, have made and invented a new and useful Improvement in Hammocks, of which the principal feature is the combination of three cross-bars with the bed and suspensory ropes in such a manner as to divide the hammock into two parts, a main or body part and an adjustable foot-rest, the object thereof being to provide a hammock in which the occupant may lie in an easy natural position, the head above and the feet below the central portions of the body, and which may be converted, if desired, into a reclining-chair.

The following is a specification of my invention, reference being had to the accompanying drawings, in which like numbers mark like parts, and in which—

Figure I is a perspective view of my improved hammock; Fig. II, a sectional plan of the same, showing the arrangement and connections of the bed, cross-bars, and suspensory ropes; Fig. III, an edge elevation of the last-named arranged in a horizontal plane, the ropes and bars detached to illustrate the loops for receiving the cross-bars; Fig. IV, a cross-bar detached from the bed and sectioned at each end, illustrating one method of attaching the suspensory ropes; Fig. V, another sectional view of a cross-bar, showing at 12 how the suspensory ropes may be attached to the bars by winding around and tying and at 16 how such ropes may be fastened by nailing; Fig. VI, an edge elevation of the hammock, showing the relative positions of the hammock and foot-rest as effected by moving the bar 5; and Fig. VII, a perspective view of the hammock converted into a reclining-chair.

In carrying out my invention I provide a bed 1, of any suitable material, and this bed I provide with loops 2, 3, and 4, arranged one at each end and the other near the middle, as shown in Fig. III. I prefer to form such loops at the ends of the bed by turning over and securely stitching or fastening the material as if forming wide hems, and near the middle by making and securing a double or N-shaped fold for the central loop 3. The loops may also be formed by sewing separate strips of suitable material to the bed at proper

points, or they may be quite dispensed with and the bed and cross-bars connected by nailing, clamping, or other suitable means; and I further provide the cross-bars 5, 6, and 7 and the suspensory ropes 8 and 9. I make the cross-bars of a size adapted to enter the loops 2, 3, and 4 and of a length a little greater than the width of the bed 1. To connect the suspensory ropes to the bars 6 and 7, I prefer to provide such bars with perforations near each end, and, passing the ropes therethrough, the bars are subtended and supported by the ropes, as illustrated in case of rope 9, Fig. II, and in Fig. IV. I prefer to make these perforations oppositely inclined to the bar, as shown in Fig. II, as this facilitates the adjustment of the ropes; but they may be made at right angles to the longitudinal line of the bars, as shown at 11, Fig. IV, or they may be dispensed with and the ropes wound and tied around the bars, as at 12, Fig. V, or nailed thereto, as at 16, Fig. V, or they may be attached thereto by any other suitable means. I connect the bar 5 to the rope 8 in such a manner as to form an adjustable foot-rest 14. To accomplish this I do not connect the bar permanently to the rope, but make it movable thereon, so it may be shoved to and from the bar 6, whereby the rest is made deeper or shallower at the desire of the occupant. In carrying out this part of my invention I prefer to form the adjustable connection by passing the rope 8 through the oppositely-inclined perforations in bar 5, as shown in Fig. II, and then when no one is in the hammock the bar 5 may be readily moved to and fro on the rope 8, so as to raise and lower the foot-rest 14, as shown in Fig. VI, the main lines showing the position of the hammock and foot-rest, the bar 5 at nearly its greatest distance from bar 6, while the dotted lines show the position of the hammock and foot-rest when the bar 5 is at 5', and when the holes in the bar 5 are arranged as shown in Fig. II the weight of a person in the hammock, drawing the suspensory ropes taut, causes such bar to catch or bite on the rope, and so maintain the position of the foot-rest 14. In other words, this position of the holes and arrangement of the rope in bar 5 is equivalent to an automatic fastening to hold the foot-rest at any given point; but the perforations in bar 5 may be

at right angles to its longitudinal line, as at 11, Fig. IV, and so parallel to each other, or they may be entirely dispensed with and the bar connected to the rope 8 by cords or other  
 5 suitable means, which may be unfastened, the bar moved, and the position of the foot-rest changed at the will of the occupant.

To form a chair of the hammock, the head end of the bed is simply hitched higher, the  
 10 foot end lower, and the bar 5 shoved back against the bar 6, the foot-rest forming a curtain to the chair-seat, as shown in Fig. VII.

In practice I prefer to provide the cross-bars with holes and pass the ropes through  
 15 such holes and along the bars, so that the ropes will extend through the bed-loops, as shown in Fig. II, bar 7. By this means, if a bar break, the hammock will not fall. I also prefer to have the ends of the ropes at the  
 20 hook and each end provided with a ring or fastening, as shown at 15 15', Fig. II. By this arrangement both ends of the rope may be hung on the same hook, allowing the hammock to swing, or on different hooks at some  
 25 distance apart, so as to steady the hammock and prevent the swinging. Again, the ropes may be so arranged as to be whole at the hook and the ends brought inside and nailed to the bar, as shown at 13, Fig. II. The cross-  
 30 bars 5, 6, and 7 being inserted in the loops 2, 3 and 4 and the suspensory ropes being arranged and connected as above described, or by any suitable means, the hammock is hung

in the usual manner. The best effect is obtained by hanging the head end considerably  
 35 higher than the foot and placing the hooks or suspension-posts well apart, so as to give the hammock a long free swing.

Thus, having described my improved hammock, what I claim as new is—  
 40

1. In a hammock, the combination of a hammock-body, the transverse bars permanently attached to the ends and to the middle substantially, a suspending-cord attached to the cross-bar at one end of the hammock-  
 45 body, and a suspending-cord attached to the middle cross-bar and adjustably connected with the cross-bar at the other end, whereby one end of the hammock is adjustable to and from the middle cross-bar.  
 50

2. In a hammock, the bed or body 1, having permanently attached thereto at one end the cross-bar 5, at the other end the cross-bar 7, and near the middle the cross-bar 6, in combination with the suspending-rope 9, per-  
 55 manently attached to the bar 7, and the suspending-rope 8, permanently attached to the bar 6 and adjustably connected with the bar 5 by passing through oppositely-inclined holes near the ends of the bar last named, as speci-  
 60 fied.

SIDNEY SANDERS.

Witnesses:

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