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E. B. WESTON.

SWINGING CHAIR AND HAMMOCK.

(Application filed July 17, 1899.)

(No Model.)

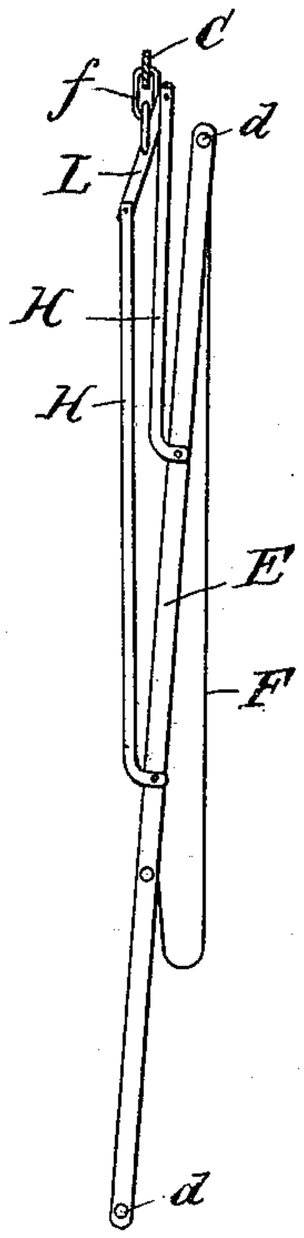

Fig. 4.

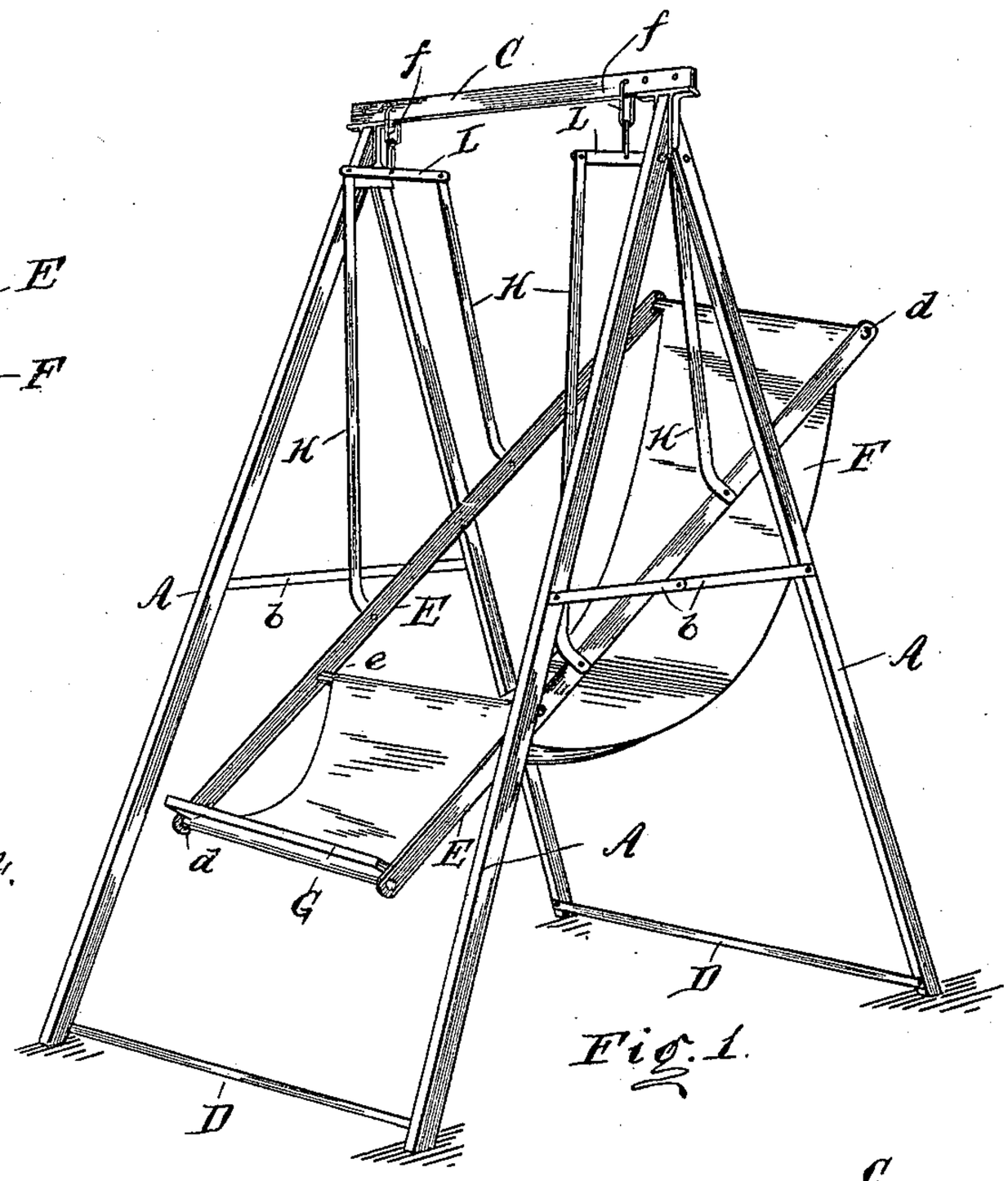

Fig. 1.

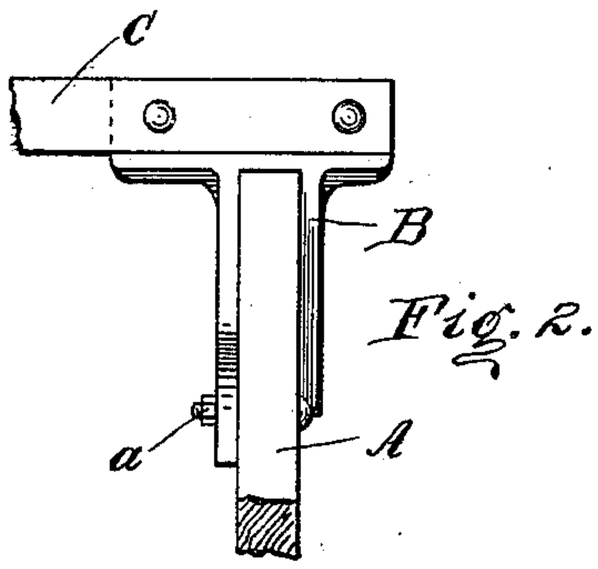

Fig. 2.

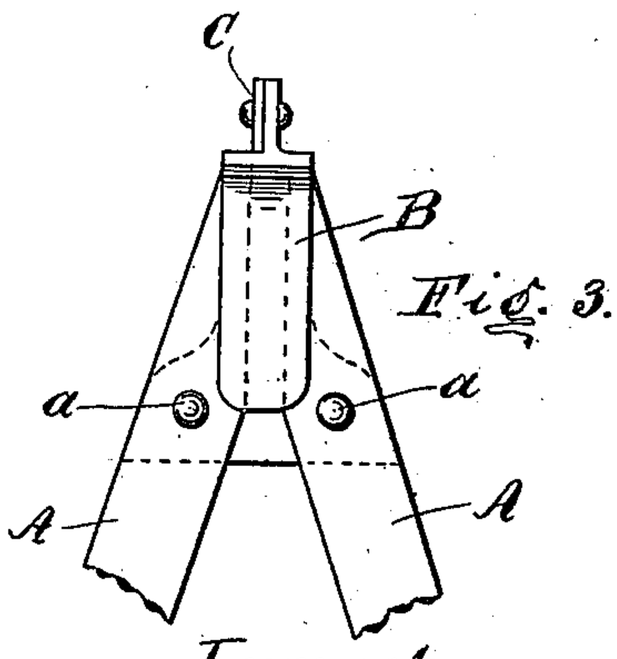

Fig. 3.

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SWINGING CHAIR AND HAMMOCK.

SPECIFICATION forming part of Letters Patent No. 639,877, dated December 26, 1899.

Application filed July 17, 1899. Serial No. 724,157. (No model.)

To all whom it may concern:

Be it known that I, EDWARD B. WESTON, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Swinging Chairs and Hammocks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to chairs and hammocks which are suspended from suitable supports to swing freely and adjust themselves into any position desired; and the purpose of the invention is to provide an automatically-adjustable swinging chair and hammock which by merely changing the position of the body will instantly change from a chair to a hammock or into any intermediate position and which shall afford a perfectly comfortable position for head, body, legs, and feet without any sharp points pressing the body.

The invention consists of a certain novel method of supporting the hammock, to be hereinafter particularly pointed out and claimed, whereby a simple frame may be employed without pivoted joints of any kind to support the seat material, which will automatically take any position desired, which cannot be upset, and in which provision is made to prevent any pinching of the arms or body as the swing is adjusted or swung from one position to another.

My invention is also designed to be readily folded up into a flat or knockdown condition without uncoupling or disturbing any of the parts, so that the swings can be easily packed together for shipment into small space and single swings can be easily transported from place to place, closed up like a step-ladder, and at once set up into position for use without any adjustment or coupling together of parts.

In the drawings, Figure 1 is a perspective view of my improved swinging chair and hammock. Fig. 2 is a detail front view of the upper ends of the supporting-standards and cross-bars. Fig. 3 is a side view of same. Fig. 4 is a side elevation of the swing, showing its normal position when unoccupied, with the standards omitted.

A A are side standards hinged at the top by the bolts *a* to the blocks B, bolted at each end of the cross-bar C.

D D are brace-rods at the bottom, and *b b* are side arms pivoted at the center, so that the framework can be folded up like a step-ladder for ready transportation.

The hammock or seat is suspended in a framework made up of sides E E and top and bottom cross-bars *d d*.

e is another cross-bar, which serves as the support for the seat.

The hammock or seat material is preferably made of canvas F or of any other suitable flexible material, which is looped around the top and bottom brace-rods *d d* and properly secured and passes over the side rod. This material is of sufficient length to form a convenient seat or hammock, and it is drooped loosely over the side rod.

G is a framework at the bottom pivoted to the side bars E E just above the lower rod *d*, so that it will hang down in a slightly-inclined position to serve as a foot-rest.

The hammock-frame is suspended by arms H H to transverse bars L L, which are in turn suspended centrally in any desired way, such as by the links *f f*, to the cross-standards C. The arms H H are pivoted on both ends, and the front pair are somewhat longer than the rear pair, so that one end of the hammock-frame will naturally swing down into the position shown in Fig. 4.

For convenience in ingress and egress I regulate the length of the front pair of arms so that when unoccupied the outer edge of the foot-rest G will just touch the ground. In order to get into the swinging chair, the occupant steps on the foot-rest G and throws himself back into the seat, which act at once swings the chair clear of the ground.

One very important distinction between my chair and others heretofore manufactured lies in the fact that to support my hammock I employ only a single rectangular frame, and with the aid of the cross-rod *e* the seat is entirely formed by the flexible material. There are thus no joints in the framework and no seat has to be provided which shall furnish sharp uncomfortable edges for the body when in a reclining position.

The lower ends of the arms H are curved,

so that at their pivotal connection with the seat-frame they are practically at right angles thereto for the usual positions, and as a result the fingers or body of the occupant are not liable to be pinched during the occupancy of the swing. The front and rear arms being somewhat separated at their pivotal connection with the frame, the weight of the occupant falls between the points of support, and these arms being pivoted not together, as is usual, but to the transverse bars L L, and the front pair of supporting-arms being longer than the rear, the rectangular frame within which the hammock is mounted will take and maintain any position desired, from upright seat to full recline, by merely changing the position of the body. Nor is it possible to so swing the seat as to upset. Before the rectangular frame reaches a horizontal position the transverse bars L must incline to accommodate the difference in length of the supporting-arms, so that the upper edge of the transverse bars will come in contact with the cross-bar C and prevent the occupant being thrown back far enough to upset, no matter how much swinging motion may be given.

As has already been stated, the fact that I employ merely a rectangular frame without any fixed seat enables me to readily close up the swing for transportation.

Heretofore all swinging chairs that I am familiar with have provided a seat and back at an angle to each other, so that without uncoupling some of the parts it has not been possible to knock down or flatten out the swinging chair. My construction also enables me to build the entire article out of steel bars riveted together, and thus to cheapen the manufacture to a very large extent.

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

1. In a swinging chair, the combination, with suitable supporting-framework, of a rectangular frame, and a cross-bar for the seat with flexible material therefor, arms for supporting the rectangular frame, transverse bars to which said arms are pivoted, and pivotal connection for said transverse bars to the supporting-framework, substantially as shown and described.

2. In a swinging chair, the combination, with suitable supporting-framework, of a rectangular frame and a cross-bar for the seat with flexible material therefor, side arms of unequal length in front and rear for supporting the rectangular frame, transverse bars to which said arms are pivoted and pivotal connection for said transverse bars to the supporting-framework, substantially as described.

3. In a swinging chair, the combination, with suitable supporting-framework, of a rectangular frame, provided with a cross-bar for the seat and flexible material secured to the ends of said rectangular frame, two pairs of said arms of unequal length in front and rear for supporting the chair, transverse bars to which said arms are pivoted and links for pivoting said transverse bars medially to the supports, substantially as described.

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