May 28, 1957 MacARTHUR WARDELL, JR 2,793,375

SELF-ROCKING HAMMOCK

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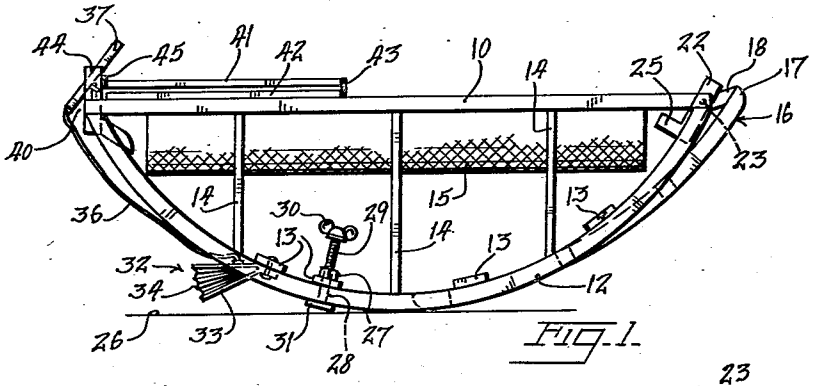


FIG. 1.

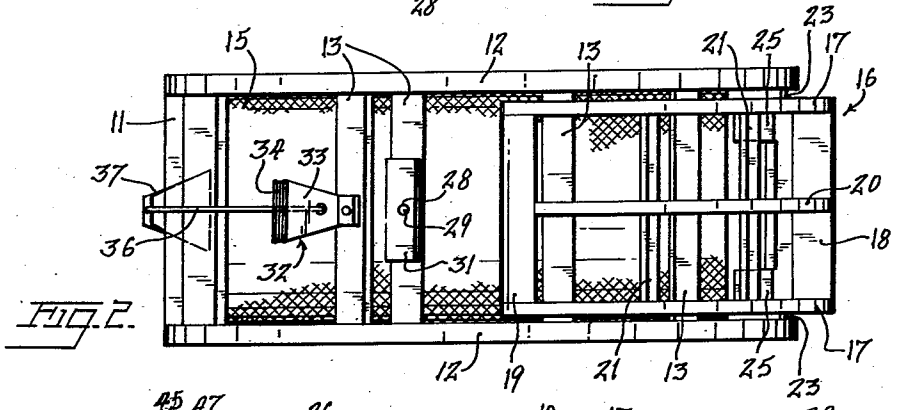


FIG. 2.

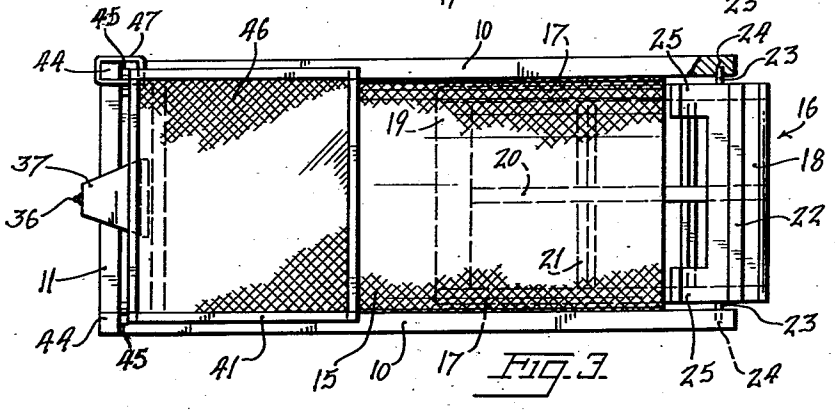


FIG. 3.

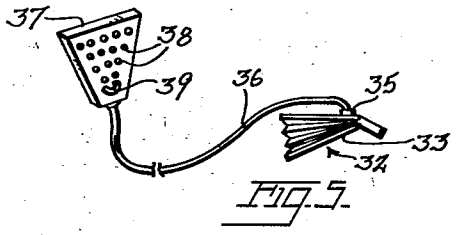


FIG. 5.

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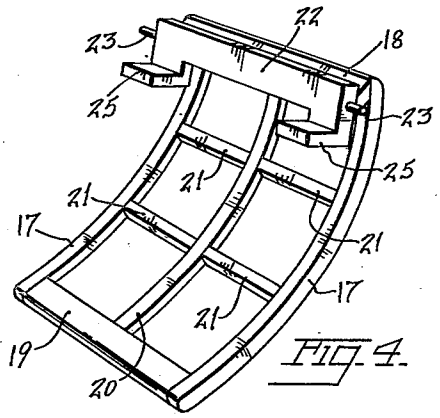


Fig. 4.

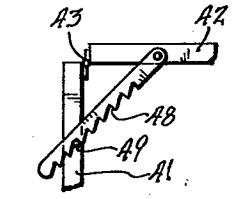


Fig. 6.

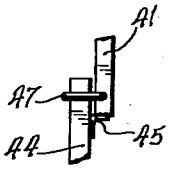


Fig. 7.

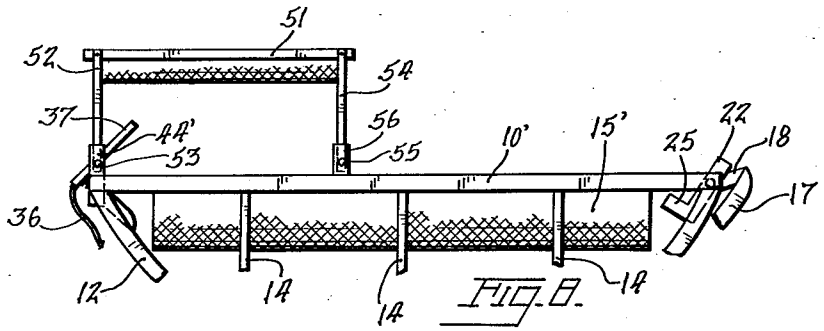


Fig. 8.

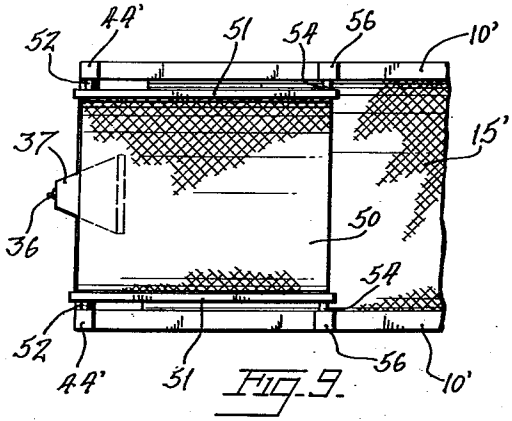


Fig. 9.

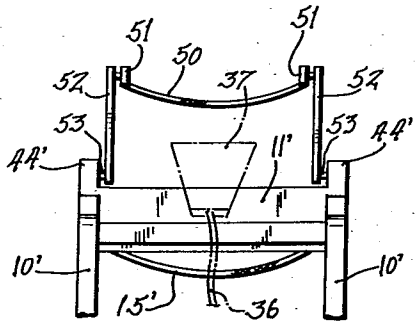


Fig. 10.

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SELF-ROCKING HAMMOCK

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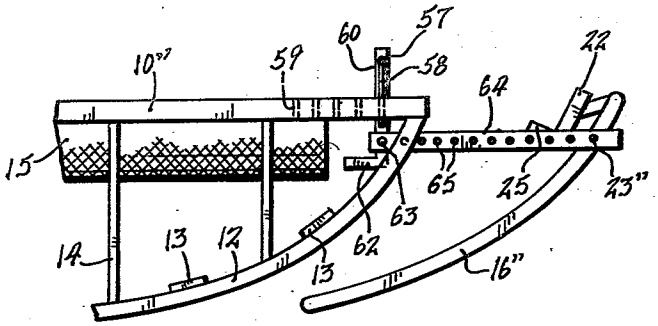


FIG. 11.

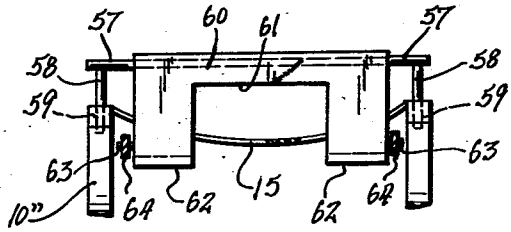


FIG. 12.

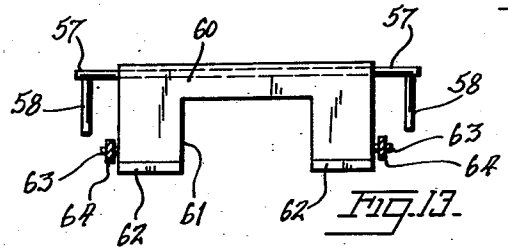


FIG. 13.

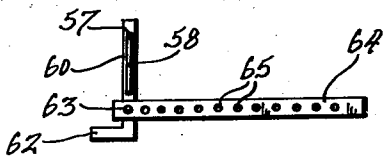


FIG. 14.

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2,793,375

Patented May 28, 1957

2,793,375

SELF-ROCKING HAMMOCK

MacArthur Wardell, Jr., Jamaica, N. Y.

Application July 31, 1953, Serial No. 371,592

3 Claims. (Cl. 5—105)

This invention relates to new and useful improvements in rockable hammocks.

A prime object of the present invention is to provide a rockable hammock with novel means for manually rocking the hammock by the occupant while lying in the hammock and with a minimum of effort.

Another object of the invention is to provide a rockable hammock with means for supporting the hammock in an inclined position and against rocking motion.

A further object of the invention is to provide a rockable hammock with means for air conditioning the hammock.

Still another object of the invention is to provide a hammock with a canopy to protect the occupant from the sun.

Yet another object according to a modification of the invention is to provide a hammock having an auxiliary extensible frame adjustable to accommodate occupants having long or short legs.

It is further proposed to construct a rockable hammock which is simple and rugged in construction.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claims in which the various novel features of the invention are more particularly set forth.

On the accompanying drawings forming a material part of this disclosure:

Fig. 1 is a side elevational view of a hammock embodying the invention in a horizontal position.

Fig. 2 is a bottom plan view thereof.

Fig. 3 is a top plan view thereof.

Fig. 4 is an enlarged perspective view of the actuating lever device.

Fig. 5 is a plan view of the air conditioning apparatus removed from the hammock.

Fig. 6 is a fragmentary detail side elevational view showing the device for holding the canopy frame sections in adjusted position.

Fig. 7 is a fragmentary detail side elevational view showing the device for holding the canopy frame section in upright position.

Fig. 8 is a fragmentary side elevational view of a hammock embodying a modified form of canopy.

Fig. 9 is a top plan view thereof.

Fig. 10 is a rear view thereof.

Fig. 11 is a fragmentary side elevational view of the rear end of a hammock embodying a still further modification of the invention.

Fig. 12 is a rear elevational view of the hammock of Fig. 11 with the rockable lever omitted.

Fig. 13 is a front elevational view of the auxiliary extensible frame.

Fig. 14 is a side elevational view thereof.

Referring in detail to the drawings and particularly to Fig. 1, the hammock made in accordance with the present invention comprises an elongated rocking frame of wood

or other suitable material having a pair of side rails **10**, **10** and a rear end rail **11**. A pair of semi-circular rails **12**, **12**, constituting rocker members, are secured at their extremities to the ends of the top rails **10**, **10**. A plurality of transverse rails **13** brace the rocker members **12**, **12**, and a plurality of spaced upright rails **14** connect and brace the top side rails **10**, **10** and the rocker members **12**, **12**. The rails forming the frame of the hammock may be fastened together by cement or in any other suitable manner.

A flexible hammock member **15** is looped and suitably secured along its sides to the top side rails **10**, **10** and is suspended therebetween for supporting an individual in a reclining position. This hammock member may be made of different materials but preferably is made of woven canvas or duck. It is sufficiently wide so that when it sags in the center it is transversely arcuate in order to provide a comfortable support for the individual and prevent his rolling out.

In order to propel the hammock, an actuating lever frame device **16**, shown in detail in Fig. 4, is pivotally connected to the ends of the top side rails **10**, **10** and is disposed between the rocker members **12**, **12**, at the front of the frame. The lever frame device is rectangular in shape and consists of a pair of curved side rails **17**, **17**, curved to conform to the shape of the adjacent portions of the rocker members **12**, **12**. A transverse rail member **18** connects the rails **17**, **17** at one end, and a transverse rail **19** connects the rails **17**, **17** at their other end. A curved rail **20** connects the end rails **18** and **19** at their centers. The side and center rails are braced by transverse rails **21** extending therebetween. The lever frame rails may be fastened together by cement or the like. The transverse rail member **18** at the front of the frame is formed along its inner edge with an enlargement or block head **22** extending the length of the rail member. This block head **22** supports trunnions **23** projecting from its ends and journalled in perforated bearings **24** in the adjacent ends of the top rails **10**, **10** whereby the lever frame device is pivotally mounted.

At each end of the block head **22**, there is formed a substantially L-shaped foot rest or pedal **25** projecting inwardly toward the hammock supporting member **15** for actuating the lever device. The pedals **25** project into the area occupied by the feet of the occupant of the hammock when lying down. In order to rock the hammock, the occupant merely places his feet on the pedals and exerts an outward and downward pressure or thrust thereupon, which pressure is transmitted to the free inner end of the lever device whereupon, the supporting surface **26** serving as a fulcrum, an upward pressure will be exerted upon the hammock frame forward of its center point thereby lifting said front portion upwardly and dipping the rear portion of the hammock. When the downward pressure of the feet is released, the forward portion of the hammock will rock downwardly causing the rear to rock upwardly, and repeated thrusts on the foot pedals **25** will cause a reciprocation of the hammock endwise, or a rocking action of the hammock.

The invention also contemplates apparatus for holding the rear portion of the hammock in a raised position to permit the occupant to assume a more erect position than a reclining position, and also for preventing the rocking motion of the hammock. This apparatus comprises a nut member **27** fixed over an opening **28** in one of the transverse rails **13** of the hammock frame at a point to the rear of the center point of said hammock frame. A lifting screw member **29** extends through and is in threaded engagement with the nut member **27**, passing out through the opening **28** in the rail **13** to the outside of the rocker members **12**, **12**. A finger piece **30**

is fixed on the inner end of the screw member **29** for actuating the same, and a foot or base member **31** is fastened to the outer end thereof. In order to lift the rear end of the hammock and hold it against rocking movement, the screw member **29** is turned until its foot member **31** engages the supporting surface **26** and continued turning of the screw member will cause the rear portion of the hammock to ride up on the screw member and be held in raised position by the screw, and the hammock held against rocking movement by the foot member.

Apparatus is also provided for air conditioning the hammock and cooling the occupant thereof, which apparatus includes a triangular-shaped air bellows **32** of ordinary construction having a base **33** supporting a plurality of superposed diaphragm units **34**, with an outlet **35**. An air hose **36** connects the outlet **35** with an air distributing device **37** having a plurality of air vents **38** in one face thereof. The distributing device **37** is supported on the rear rail **11** of the hammock frame by means of a loop **39** on its vented face engaging a hook **40** on the rear rail. The distributing device is supported at an angle to its support in order that the air will be blown over the entire area of the hammock member **15** for cooling off the occupant thereof.

A canopy for protecting the occupant of the hammock from the sun's rays is also provided and consists of a pair of square frame members **41** and **42** hingedly connected together by a hinge **43** at each side thereof, with the frame member **41** connected to the rear corner posts **44** extending upwardly from the rear rail **11** by hinges **45**. A fabric cover **46** is stretched over and secured to each of the frame members **41** and **42**. The frame member **41** is adapted to be moved to an upright position and held in such position by a latching bail **47** secured to one side of said frame member adjacent one corner thereof and which is adapted to be swung over the adjacent corner post **44** as shown in Fig. 7. The other frame member **42** is adapted to be moved relative to the frame member **41** and held in moved position by a ratchet bar **48** pivotally mounted at one end of one side of the frame member **42** engaging a pin **49** on the adjacent side of the frame member **41**, as shown in Fig. 6.

Figs. 8 to 10, inclusive, illustrate a modified form of canopy wherein a fabric cover **50** is secured at its sides to side rails **51**. The side rails **51** are pivotally supported at their rear ends on legs **52** which are pivotally supported on pivot pins **53** extending laterally from the corner posts **44'** on the rear end rail **11'** of the hammock frame. The front ends of the side rails are similarly pivotally connected to legs **54** which are pivotally connected to pivot pins **55** extending laterally from posts **56** on the side rails **10'**, **10'** of the hammock frame. The supporting legs when extended hold the cover **50** in raised position over the hammock to protect the occupant of the hammock, and when folded cause the cover **50** to become nested in the flexible hammock member **15'**. The canopy may be held in extended position by a pin and ratchet bar arrangement as shown in Fig. 6.

In all other respects the form of invention shown in Figs. 8 to 10, inclusive, is the same as the form of Fig. 1 and similar reference numerals are used to indicate similar parts.

Referring now to the modification shown in Figs. 11 to 14, inclusive, herein an auxiliary extensible frame is provided for extending the overall length of the apparatus. The extensible frame consists of a shaft **57** having legs **58** adjacent its ends and extending at right angles thereto and adapted to be seated in a pair of opposed holes **59** in the top rails **10''** of the main frame at the front thereof. A rectangular shaped metal plate **60** is supported by the shaft **57** between its legs. The plate is provided with a cutaway portion **61** and is formed with rearwardly extending flanges **62** on both sides of the cutaway portion, serving as pedals.

Pivot pins **63** extend laterally from the ends of the plate adjacent the flanges for supporting bars **64** which project laterally of the plate and form an extension of the main frame. The bars are formed with spaced openings **65** for receiving the pins **63** and for receiving the pivot pins **23''** of a rockable lever **16''**, the construction and operation of which are similar to the rockable lever **16** of the form of Fig. 1. By reason of this construction, the plate **60** may be moved along the top rails **10''** and supported in any desired pair of opposed openings **59** therein. The rockable lever is movable along the bars **64** towards and away from plate **60** for accommodating the legs of the occupant of the hammock.

In all other respects the form of invention shown in Figs. 11 to 14, inclusive, is similar to the form shown in Fig. 1 and similar reference numerals are used to indicate similar parts.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions herein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claims.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is :

1. A rockable hammock comprising a rocking frame having a pair of semi-circular rocker members, a flexible member for supporting a person in a reclining position disposed between said rocker members, a lever frame device pivotally secured to one end of the rocking frame for rocking the rocking frame, foot operated means for actuating said lever frame device, and manually operated apparatus for raising one end of the rocking frame and holding said rocking frame against rocking movement, said apparatus including a nut member fixed on the rocking frame at one side of the center line of the rocking frame, a lifting screw extending through and coacting with said nut member and a foot member on the lifting screw below the rocking frame adapted to engage the supporting surface for the rocking frame.

2. A rockable hammock comprising a rocking frame having a pair of semi-circular rocker members, a flexible member for supporting a person in a reclining position disposed between said rocker members, a lever frame device pivotally secured to the end of the rocking frame for rocking the rocking frame, foot actuated means for actuating said lever frame device, an air bellows secured to the rocking frame and actuated thereby, an air distributing device positioned over the flexible member and a flexible tubular connection between the air bellows and distributing device.

3. A rockable hammock comprising an elongated rocking main frame including side rails with openings through their top surfaces, a transverse rail connecting said side rails at one end thereof, a flexible member supported on the side rails for supporting a person in a reclining position, and an auxiliary extensible frame adjustably connected to one end of the main frame, said extensible frame including a shaft having depending legs seated in the openings in the top surfaces of the side rails, a plate supported on said shaft between said depending legs, said plate having a cutaway portion with forwardly extending flanges on both sides of said cutaway portion, laterally extending pins on the ends of said plate, elongated bars having opposed openings therealong for receiving said pins, and a rocking lever having laterally extending pivot pins journalled in others of said openings.

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