S. A. EKEHORN.

CONVERTIBLE BODY SUPPORT.

APPLICATION FILED MAY 17, 1921.

1,405,768. Patented Feb. 7, 1922.

Fig. 1.

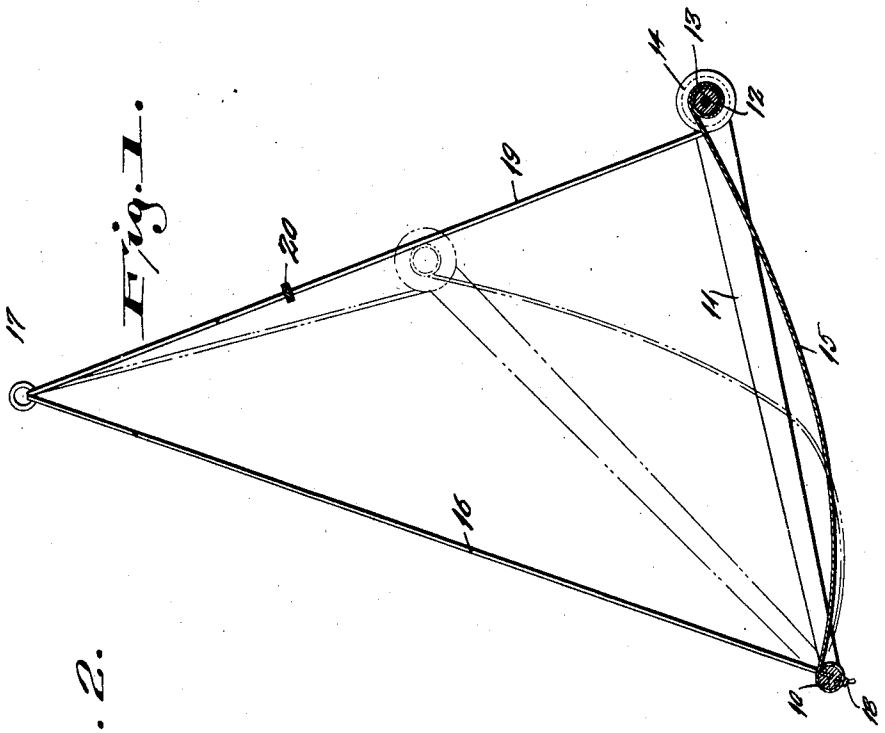
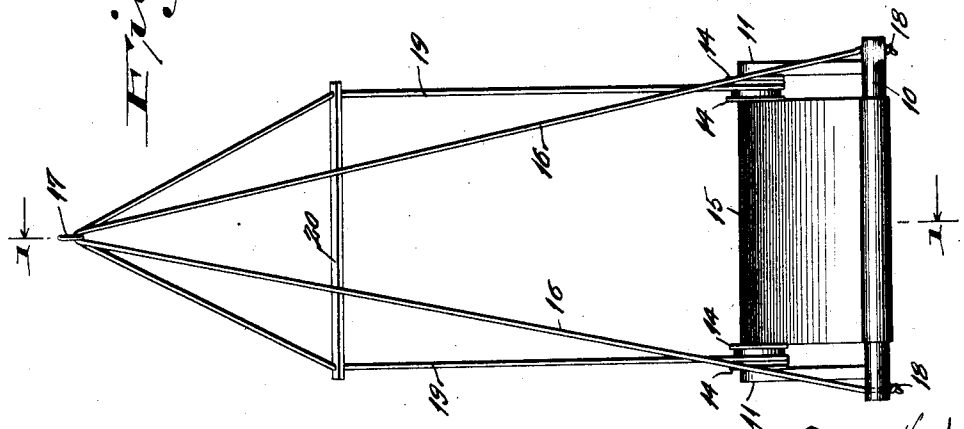


Fig. 2.



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CONVERTIBLE BODY SUPPORT.

1,405,768. Specification of Letters Patent. Patented Feb. 7, 1922.

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To all whom it may concern:

Be it known that I, SVEN A. EKEHORN, a subject of the Kingdom of Sweden, and resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Convertible Body Supports; and I do hereby declare that the following is a full, clear, and exact description thereof.

The invention relates to improvements in convertible body supports, and more particularly to a combination hammock and chair type of the same.

The principal object of the invention is to provide for a comparatively simple and inexpensive form of combination hammock and chair of a nature to be readily convertible from a position for the supporting of the body of a person in an erect sitting or semi-reclining position to a position for the supporting of the body of the person in a fully reclined position, the convertible movement of the same being accomplished, or otherwise controlled by the mere shifting of the weight of the body of the person to and from either of a sitting, semi-reclining or fully reclined position on the same.

With the foregoing and other objects in view, the invention resides in the certain novel and useful construction and arrangement of parts as will be hereinafter more fully described, set forth in the appended claim, and illustrated in the accompanying drawing, in which:—

Figure 1 is a vertical section of the preferred embodiment of the invention taken on the line 1—1 of Figure 2, and

Figure 2 is a front elevation thereof.

Referring to the drawing, the numeral 10 indicates a front bar or rod, preferably circular in cross-section, 11 a pair of spaced parallel side bars connecting the front bar or rod 10 at points slightly inward of the opposite ends thereof, and 12 a shaft journaled in the rear ends of the side bars 11 in parallel relation with respect to the front bar or rod 10, all constituting the frame of the body support. Mounted for comparatively free rotation on the shaft 12 is a roller 13 which is formed to provide pairs of spaced annular flanges 14 at its opposite ends, and secured to and wound on the roller 13, between the inner of the spaced flanges 14, is one end portion of a suitable length of fabric 15, such as canvas or other similar material, the other end of which is secured to the front bar or rod 10 of the frame. The length of canvas 15 is sufficient to give full support to the major portion of the body of a person under all conditions of its use for the purpose, and its width is equal to the length of the roller 13 between the inner of the flanges 14.

The front end of the frame is adapted to be supported at a desired height from the floor or ground level by means of a flexible element 16, such as a chain, cable or rope, which is preferably trained through a ring support or member 17, and has its opposite ends secured, as at 18, at the ends of the bar or rod 10 outward of the points of connection therewith of the side bars 11. The rear end of the frame is adapted to be supported by means of a similar flexible element 19 which is also trained through the ring support or member 17, and has its opposite ends secured to the roller 13, one between each of the pairs of annular flanges 14, which constitute pulleys for the winding and unwinding of the opposite end portions of the flexible element 19 thereon and correspondingly one end with respect to the other. A spacing bar 20 is preferably threaded on the opposite depending portions of the flexible element 19 at a distance above and in substantial parallel relation with respect to the roller 13, whereby to hold the lower depending portions thereof, below the bar 20, spread apart one vertically parallel to the other.

In the use of the device as a hammock, the rear end portion of the canvas 15 is normally wound on the roller 13, and the connected end portions of the flexible element 19 unwound from the pulleys 14, the said end portions of the canvas 15 and the flexible element being wound one in a direction opposite to the other whereby the unwinding action of one imparts a winding action to the other, in which position, the frame is rearwardly and upwardly inclined to a slight degree, and the canvas 15 has just enough slack in the same to comfortably conform to the natural curvature of the body of a person reclining thereon. When a person assumes a sitting position at the forward end of the frame, the canvas 15 will unwind from the roller 13, and the end portions of the flexible element 19 will be automatically wound on the pulleys 14,

and the frame and the canvas will assume the position, approximately that of a comfortable chair, as indicated in dotted lines in Figure 1 of the drawing, when, upon again moving the body to a rearwardly inclined position, the flexible element 19 will unwind from the pulleys 14 and effect a rewinding of the canvas to its normal position.

From the foregoing, it is thought that the construction, operation and many advantages of the herein described invention will be apparent to those skilled in the art, without further description, and it will be understood that various changes in the size, shape, proportion and minor details of construction, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

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

A combination hammock and chair comprising an elongated frame, a fixed flexible element supporting the forward end of said frame, a roller carried at the rear of said frame, a second flexible element supporting the rear end of said frame and having its opposite ends secured to said roller, and a flexible body support extending longitudinally of said frame and secured at one end to front end thereof and having its other end secured to said roller, said roller being adapted to be rotated for the simultaneous winding and unwinding of the connected portions of the second flexible element and the flexible body support correspondingly with the shifting of the weight of the body of a person on said body in movements to and from sitting or reclining positions thereon.

In testimony that I claim the foregoing I have hereunto set my hand at Milwaukee, in the county of Milwaukee and State of Wisconsin.

SVEN A. EKEHORN.