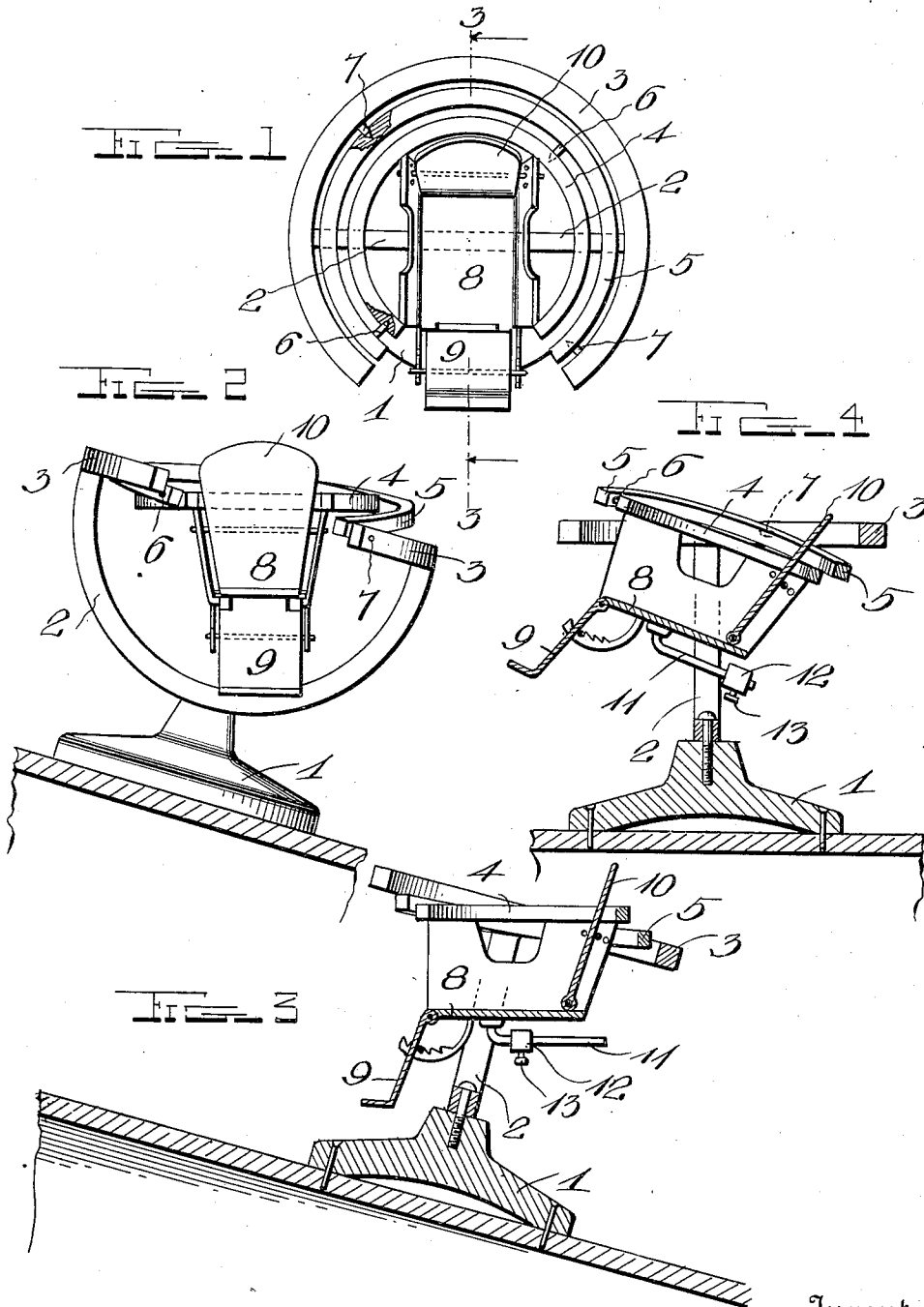


R. R. REED.
CHAIR.

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968,195.

Patented Aug. 23, 1910.



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UNITED STATES PATENT OFFICE.

RALPH R. REED, OF SAN FRANCISCO, CALIFORNIA.

CHAIR.

968,195.

Specification of Letters Patent.

Patented Aug. 23, 1910.

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To all whom it may concern:

Be it known that I, RALPH R. REED, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Chairs; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in self-leveling chairs.

One object of the invention is to provide a chair which is particularly adapted for use on ships and having means whereby the same is always supported in a level position irrespective of the rocking or rolling motion of the vessel in any direction.

Another object of the invention is to provide a chair of this character having means whereby the back and foot rest may be adjusted to different angles.

With the foregoing and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts, as will be more fully described and particularly pointed out in the appended claim.

In the accompanying drawings, Figure 1 is a plan view of a chair constructed in accordance with the invention; Fig. 2 is a sectional view of a portion of a ship's deck, showing a front view of the chair arranged thereon and illustrating the operation of the chair when the ship is rolling sidewise; Fig. 3 is a vertical section through the center of the chair and a portion of the deck on the line 3—3 of Fig. 1; showing the position of the parts when the ship is rocking endwise; Fig. 4 is a view similar to Fig. 3, showing the chair supporting devices in an upright position and the chair arranged as a reclining chair.

Referring more particularly to the drawings, 1 denotes the supporting base which is adapted to be secured to the deck of a ship or other support in any suitable manner. Revolvably mounted on the base 1, is a supporting frame which comprises a semi-circular or substantially U-shaped base engaging portion 2, on the upper end of which is secured a horizontally disposed substantially circular chair receiving portion 3. Arranged within the upper portion or ring 3 are inner and intermediate concentrically

arranged chair supporting rings or "gimbals" 4 and 5. The inner ring 4 is pivotally connected to the intermediate ring 5 by pivot pins 6 which are arranged therein, as shown. The intermediate ring 5 is pivotally connected to the outer ring or upper portion of the supporting frame 3 by pivot pins 7 which are arranged at substantially right angles to the pins 6 which connect the inner and intermediate rings together.

Arranged in the inner supporting ring 4, is a chair or seat 8, the side portions of which are secured to the ring 4 in any suitable manner. The side portion of the chair 8 is preferably arranged below the level of the rings 4 and 5 and upper portion of the frame, as shown. The chair is provided with an adjustable foot rest 9 and back 10, whereby the chair may be adjusted to support the occupant in a reclining position.

Arranged on the under side of the chair, is a weight supporting bar 11, on which is slidably mounted a weight 12 which is adapted to be adjusted on the bar to hold the chair in an inclined or tilted position. The weight 12 is held in its adjusted engagement with the bar 11 by a set screw 13 or other suitable fastening device.

A chair constructed in accordance with my invention will be, at all times, supported in a level position, irrespective of the rocking or rolling motion of the ship, thus preventing sea-sickness. By revolvably mounting the chair upon the base 1, said chair may be swung around in any direction. The provision of the adjustable weight 12 will counter-balance the weight of the chair and hold the same in a tilted position, thus permitting the occupant to lean back or to sit in an upright position.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention, as defined in the appended claim.

Having thus described my invention, what I claim is:

In a chair of the class described, a supporting base, a frame revolvably mounted thereon, said frame comprising an upright

U-shaped member with its intermediate portion fixed to said base and having a substantially circular chair receiving member arranged at right angles and fixed to the free
5 ends of said U-shaped member, a series of open rings arranged in said upper circular member of the supporting frame, means to pivotally connect one of said rings with the circular member of said frame, means to
10 connect the other ring with the first mentioned ring at right angles to the pivotal

connection of the latter with the frame, a chair arranged in said rings, and adjustable means to hold the chair in tilted position.

In testimony whereof I have hereunto set
my hand in presence of two subscribing
witnesses. 15

RALPH R. REED.

Witnesses:

A. D. POWERS,
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