(No Model.) 2 Sheets—Sheet 1.

# D. JOHNSON.

## ROTARY DINING TABLE.

No. 396,089. Patented Jan. 15, 1889.

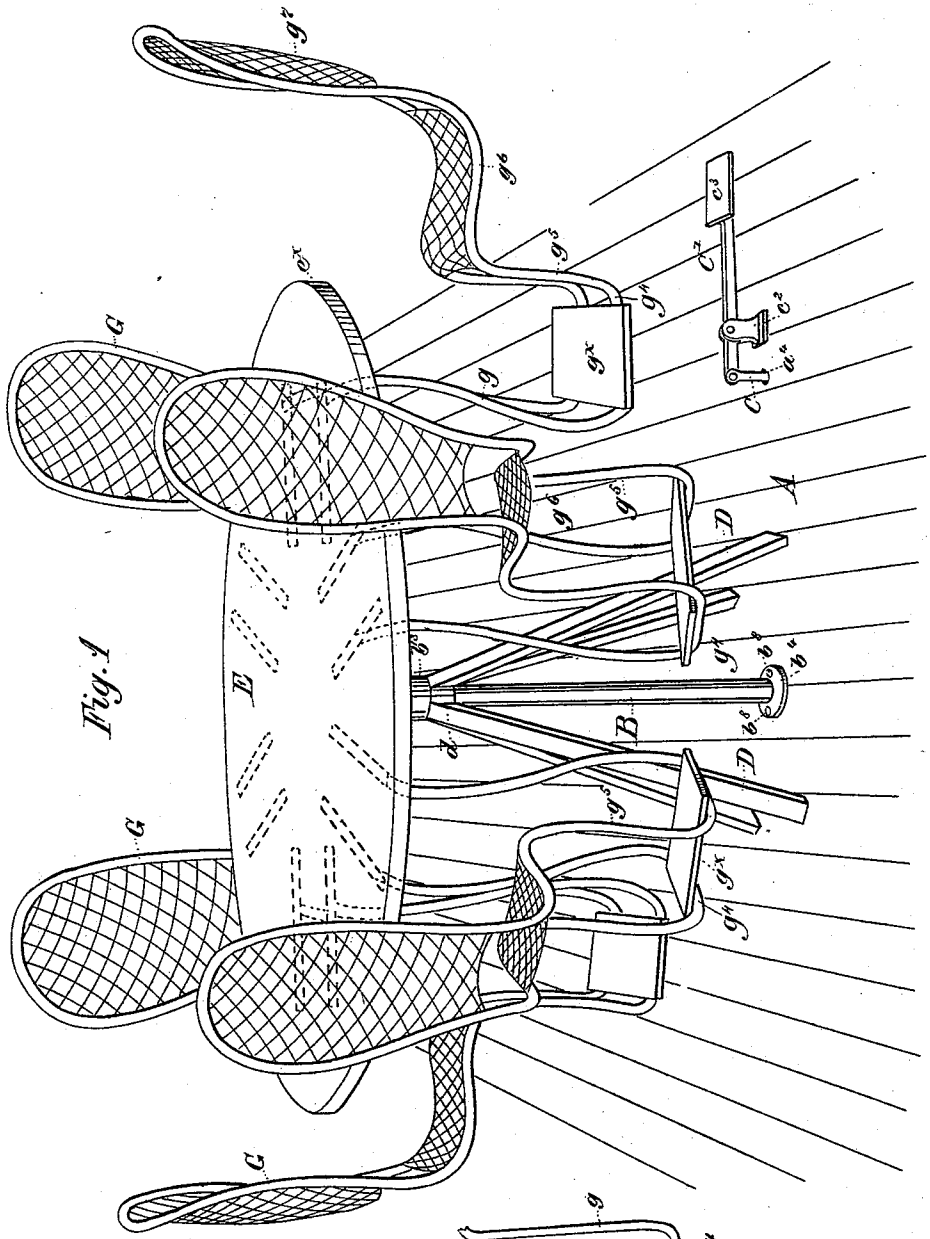


Fig. 1

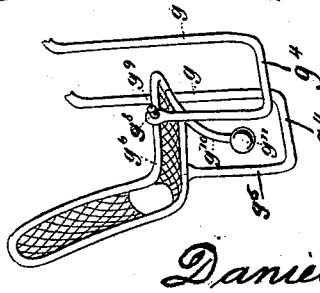


Fig. 6

Witnesses

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(No Model.) 2 Sheets—Sheet 2.

# D. JOHNSON.

## ROTARY DINING TABLE.

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*Fig. 2.*

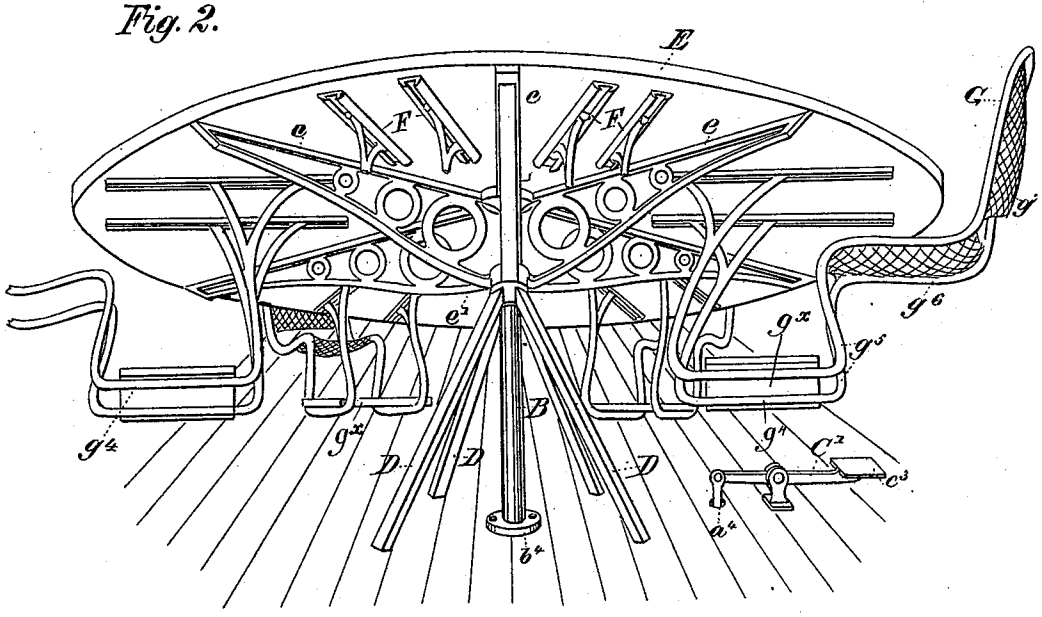



*Fig. 3*

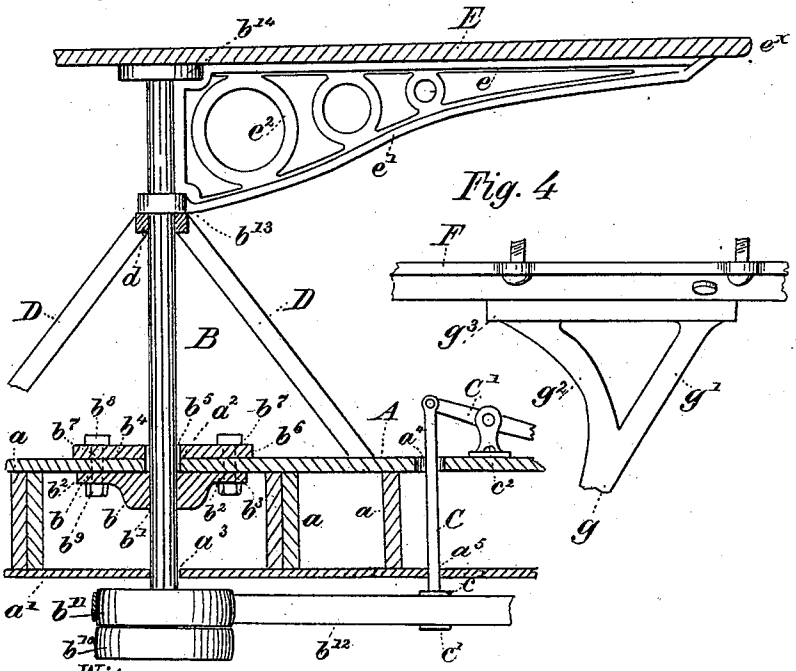
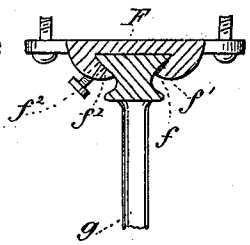



*Fig. 4*




*Fig. 5*




Witnesses

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# UNITED STATES PATENT OFFICE.

DANIEL JOHNSON, OF KANSAS CITY, MISSOURI.

## ROTARY DINING-TABLE.

SPECIFICATION forming part of Letters Patent No. 396,089, dated January 15, 1889.

Application filed July 30, 1888. Serial No. 281,474. (No model.)

*To all whom it may concern:*

Be it known that I, DANIEL JOHNSON, a citizen of the United States, residing at Kansas City, in the county of Jackson, State of Missouri, have invented certain new and useful Improvements in Rotary Dining-Tables; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

My invention has for its object, primarily, a combined rotary table and adjustable chair adapted for saloons of sea-going vessels and of other descriptions, in which the occupants of the chairs may be served in rotation from one stationary base of supply without the danger and inconvenience incident to the person making the circuit of the table when the vessel is upon the seas, and also enabling the persons seated at the table to be served with dispatch; and it consists in the novel construction and combination of parts hereinafter fully described, and specifically pointed out in the claims.

In the drawings, Figure 1 is a view in perspective of a circular rotating table supported upon a central rotating shaft extending through the floor, and chairs adjustably attached to and suspended from the table. Fig. 2 is a view in perspective of the table and chairs, taken from a position looking up from beneath the table and showing the supporting-guides for the chair-supports. Fig. 3 is a detail vertical sectional view taken through the table and floor, showing the rotating power-shaft bearing and pulleys. Fig. 4 is a detail view of one of the retaining-guides and a portion of the chair-supports therein. Fig. 5 is a transverse sectional view of the guide and the portion of the support as seen in Fig. 4. Fig. 6 is an alternate form of chair.

Similar letters of reference indicate corresponding parts in all of the figures.

A represents the floor of a dining-saloon. $a$ $a$ are the supporting-beams upon which the floor is laid. $a'$ is the ceiling on the under side of beams $a$ $a$. Through the floor A, between the beams $a$ $a$, is first made in a vertical relation a cylindrical shaft-opening, $a^2$, and through the ceiling $a'$, in a vertical line with the opening $a^2$, is made a similar opening, $a^3$. Upon the under side of the floor A is placed a journal bearing or box, $b$, which has an opening, $b'$, the proper size to admit a power-shaft in a vertical relation with the opening $a^2$ in the floor A, with which it registers, and at opposite ends is provided with ears $b^2$ $b^2$, which are perforated in a vertical relation at $b^3$ $b^3$. A duplicate journal bearing or box, $b^4$, is then made, of a similar size to the bearing $b$, which is placed upon the top portion of floor A, with its opening $b^5$ in a vertical line with the opening $b'$ in the bearing $b$. Through the ears $b^6$ of the bearing $b^4$ are made the perforations $b^7$, which are in a vertical line with the perforations $b^3$ of bearing $b$. Proper openings are made in the floor A in line with the perforations $b^3$ $b^7$, and through said perforations in the ears $b^2$ $b^6$ and the opening in the floor are inserted the screw-bolts $b^8$ $b^8$, which are provided with the nuts $b^9$ $b^9$ and secure the opposite bearings together. A cylindrical shaft, B, is then made of the proper length to extend in a vertical relation at one end above the floor A the desired height of the table and the lower end fitted to and extended through the openings or bearings $b^5$ $b'$ of the journal-box $b$ $b^4$, and through the ceiling $a'$ a suitable distance, and upon the extreme end of said shaft B is placed a horizontal loose pulley, $b^{10}$, and upon said shaft B, in close relation to and above said pulley $b^{10}$, is fixed rigidly on said shaft a horizontal pulley, $b^{11}$. Around the pulley $b^{10}$ is placed a band, $b^{12}$, which is connected with the engine. A suitable distance away from the shaft B, directly over the band $b^{12}$, an opening, $a^4$, is made through the floor A, and a similar opening, $a^5$, in a vertical line with the opening $a^4$, is made through the ceiling $a'$, through which opening is inserted a bar, C, which extends below the band $b^{12}$, upon the lower end of which bar is placed the band-shifting rods $c$ $c'$. Upon the upper portions of floor A, near the opening $a^4$, is placed a stationary lug, $c^2$, upon which is fulcrumed a lever, C'. To one end of the lever C', which extends to a point over the opening $a^4$ in the floor, is pivoted the upper end of the bar C, the opposite end having a foot-plate, $c^3$.

For the purpose of supporting and staying

shaft B in its vertical position braces D D D D are made, which are attached at their lower ends rigidly to the floor A on opposite sides and a suitable distance away from said shaft B and extended in an upwardly-inclined direction to the side of said shaft B. Around shaft B is placed loosely a collar, $d$, to which the upper ends of the braces D D are rigidly attached. Upon shaft B and above the collar $d$ is cast, or otherwise rigidly attached, a circular flange, $b^{13}$, of the comparative size of the collar $d$, upon which collar the flange $b^{13}$ is afforded a bearing and turns in union with the shaft B. Upon the upper end of the shaft B, attached rigidly thereto in a horizontal relation, is a circular flat plate, $b^{11}$. Upon the plate $b^{11}$, and attached fixedly thereto in a horizontal relation, is placed a circular flat table, E, the attachment to the plate $b^{11}$ of said table being made at a central point from the outer edge, $e^{\times}$, of said table E. Extending radially from the plate $b^{11}$ to the outer edge of the table E are placed the horizontal supporting-bars $e$ $e$, and extending radially from the flange $b^{13}$ in the same vertical plane of bar $e$ $e$, in an upward direction, to and connected with the extreme ends of the bars $e$ $e$, are the brace-bars $e'$ $e'$, between which bars $e'$ $e'$ are placed suitable trussed portions, $e^2$ $e^2$.

Upon the under side portion of the table E, between the contiguous radial supporting-bars $e$ $e$, and extending in the direction of the plate $b^{11}$ in a parallel relation to each other, and also at an angle to a line drawn radially from the center of the table and arranged a suitable distance apart, are rigidly attached the slotted retaining guide-plates F. The plates F are made from suitable longitudinal flat pieces of metal, narrow in width, and extending in the longitudinal direction of, and in the under side portion of, said plates are made the dovetail grooves $f$ $f$, of a suitable depth. The outer edge portions of the plates which form the sides $f$ $f'$ of the grooves are thus brought closer in relation than at the bottom of the groove. A series of adjustable suspended chairs, G G, are then made to slide to and from the table A, and for this purpose various modifications may be devised, the construction, as shown in the drawings, illustrating a high-back chair. A folding-back chair may be used and pushed entirely beneath the table, if preferred.

For the purpose of suspending the chair adjustably from the table, two vertical supports or rods, $g$ $g$, are made, each one of which is provided at its upper end with a forked portion, $g'$ $g^2$. To the upper ends of the portions $g'$ $g^2$ is attached rigidly in a horizontal relation a bar, $g^3$, which is made shorter in length than the plate F and in a wedge shape, adapted to fit the dovetail groove $f$ and slide therein. The lower ends of supports $g$ $g$ extend in a downward direction to within a suitable distance from the floor A, and to said ends at right angles, or in a horizontal relation in a direction opposite to shaft B, are firmly attached short parallel rods $g^1$ $g^1$, which extend a sufficient distance to form a foot-rest, $g^{\times}$. From the outer ends of the rods $g^1$ $g^1$ are attached in a vertical relation the lower ends of the respective vertical legs $g^5$ $g^5$ of the chair G. From the legs $g^5$ $g^5$ at right angles and in a direction opposite to the supports $g$, extending in a horizontal relation the seat $g^6$, and from the outer end of the seat $g^6$, rods are extended in a vertical relation, which forms the back $g^7$ of the chair.

In saloons of sea-going vessels the floor A and table are subjected to a racking movement, and to enable the chairs G G to vibrate and the occupant to preserve as near as may be a vertical position independent of the movement of the table the upright portions $g^5$ of the supports $g$ $g$ are cut away and removed from the front portion of the seat $g^6$, (see Fig. 6,) and in the upper ends of said portions are made the perforations $g^8$. Upon the outer side portions of the seat $g^6$, at an intermediate point between the front and back portions, are rigidly attached in a horizontal relation the pivots $g^9$, to which pivots are fitted the perforated ends of the supports $g^5$.

To the front portion of the seat $g^6$ is attached a curved bar, $g^{10}$, which extends downwardly a short distance to a point nearly in a vertical line drawn through the center of the seat $g^6$, and upon the lower end is attached rigidly a weight, $g^{11}$.

In the operation of the table the chairs G G, which are arranged around the table, are drawn out the proper distance for the seating of the occupants and secured by a thumb-screw, $f^2$, which extends through the portion $f'$ of the dovetail portions of the guide F and impinges against the bar $g^3$. The foot portion $c^3$ of the lever C′ is then depressed toward the floor, which carries the band $b^{12}$ around the pulley $b^{11}$, and the shaft B and table E, with the chairs G, are given a combined rotary movement, which may be limited in degree by the action of the foot-lever. The occupants of the chair may be then served from one stationary point near the foot-lever.

It will be observed that when the vibrating chair is used the occupant may adjust his position in relation to the table, the weight being sufficient to retain the unoccupied chair in a constant vertical position; or to assist in preserving the vertical position of the occupant the gravity of an increased weight may be utilized.

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

1. The combination, with a rotating table, of a vertical rotating power-shaft adapted to support and rotate said table, suspensory rods adjustably attached to said table, and a seat connected with said rods adapted to rotate in union with said table, as described.

2. The combination, with a rotating table provided with supporting-guides on its under

portion, of a vertical power-shaft adapted to rotate and support said table, suspensory rods adjustably attached to and beneath said table in said guides, and a vibrating seat or seats attached to said rods and rotating with said table, as described.

3. The combination, with a rotating table provided with supporting-guides on its under portion, of a vertical power-shaft adapted to support and rotate said table, suspensory rods adjustably attached to and beneath said table in said guides, a seat pivotally attached to said rods, and a counterbalancing-weight attached to said seat, for the purpose described.

his
DANIEL × JOHNSON.
mark

Witnesses:
C. S. IDLEMAN,
S. L. C. HASSON.