W. HARTLEY.

SELF LEVELING TABLE.

APPLICATION FILED MAY 22, 1912.

1,047,216. Patented Dec. 17, 1912.

Fig. 1

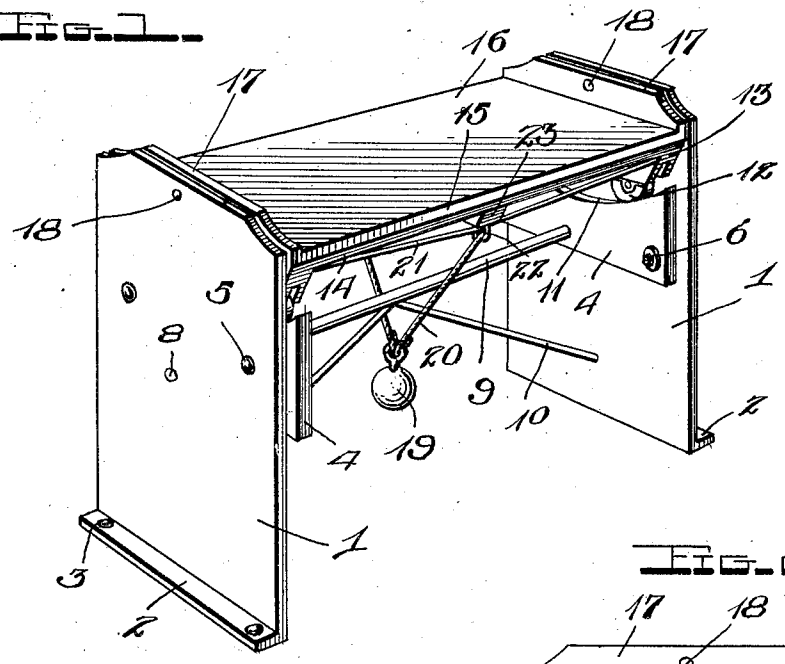


Fig. 2

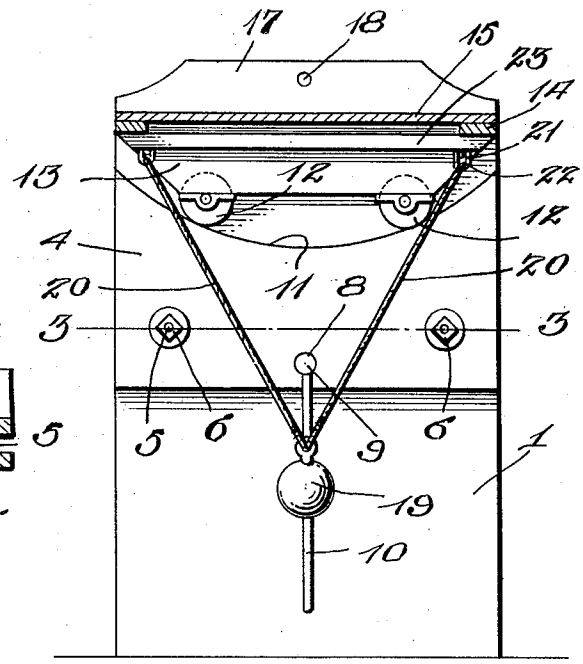
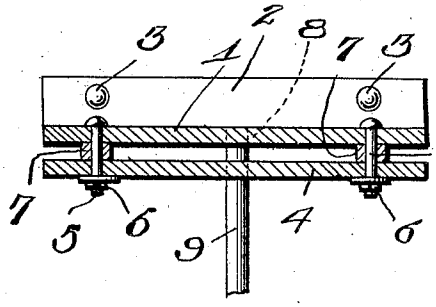


Fig. 3



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WILLIAM HARTLEY, OF STIRLING, ALBERTA, CANADA.

SELF-LEVELING TABLE.

1,047,216. Specification of Letters Patent. **Patented Dec. 17, 1912.**

Application filed May 22, 1912. Serial No. 699,057.

To all whom it may concern:

Be it known that I, WILLIAM HARTLEY, subject of the King of England, residing at Stirling, Province of Alberta, Dominion of Canada, have invented certain new and useful Improvements in Self-Leveling Tables, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to new and useful improvements in tables employed upon ship board, which will automatically retain a level position no matter what position the vessel may assume, the object of the invention being to provide a simply constructed device of this character which may be erected in the dining hall or other portion of a vessel or in a cabin, state room, or other locality, which may be for any desired purpose either as a dining or library table or the like.

Another object of the invention is to provide a table of this character which will possess advantages in points of efficiency and durability, is inexpensive to manufacture and at the same time is simple in construction and operation.

With the above and other objects in view the invention consists in the novel features of construction and the combination and arrangement of parts hereinafter more fully described, pointed out in the claims, and shown in the accompanying drawings in which,

Figure 1 is a perspective view of a table constructed in accordance with my invention. Fig. 2 is a transverse sectional view and Fig. 3 is a sectional view on the line 3—3 of Fig. 2.

Referring more particularly to the drawings, 1 indicates the vertically disposed spaced standards, each standard comprises a metallic plate having an outwardly extending flange 2 formed on the lower end thereof whereby the standards are securely fastened to the floor or deck of the ship by means of bolts 3. Secured to the inner sides of the standards and spaced therefrom are the bearing plates 4, said plates being secured to the standards by means of the bolts 5 passing through the standards and through the plates and having the nuts 6 threaded upon one end thereof. Mounted upon the bolts 5 and disposed between the standards and the bearing plates are the sleeves 7 which are adapted to space the bearing plates from the standards. The standards 1 and the bearing plates 4 are provided with a centrally arranged opening 8 adapted to receive the ends of the longitudinal brace bar 9 which supports the standards in an upright position. Having one of their ends secured to the intermediate portion of the bar 9 and their other ends secured to the lower end of the standard 7 are the brace rods 10.

The upper edges of the bearing plates 4 are provided with the curved bearing surfaces 11 upon which the rollers 12 are mounted, said rollers being journaled in the lower edge of the transverse blocks 13. The ends of the blocks are bifurcated at their lower edges for the passage of the rollers 12. Secured to the inner sides of the blocks 13 are the longitudinal side rails 14 having the transverse leaves 15 secured to their upper edges to form the top 16 of the table. Secured to each end of the table upon the upper face thereof is the vertically disposed end piece 17 having its upper edge designed coincident with the upper end of the standard 1 and is provided with an opening adapted for the reception of the pivot pin 18 which is formed upon the inner sides of the standards adjacent their upper ends.

Disposed beneath the table and above the floor upon which the standard 1 rests is a suitable weight 19 which is connected by means of flexible elements 20 to each side of the table top.

When it is found desirable to use a table of extraordinary length, I provide suitable supporting rods 21 which are secured at their ends to the inner sides of the transverse blocks 13 and having their intermediate portion disposed in the rings 22 which are secured to each end of the central transverse member 23. It will be understood that the supporting rods 21 are to be eliminated when the table is of the usual length.

From the above description taken in connection with the drawings it will be apparent that the weight 19 serves to maintain the table top 16 in a level position no matter what position the standards 1 may be caused to assume by the rocking of the vessel. Thus when the table is erected upon a vessel and the vessel rolls or pitches through the motion of the waves the weight 19 will maintain the table top 16 in a level position so that the contents of the table will not be disturbed by the motion of the vessel. It

will also be seen that the rollers 12 form suitable bearings upon which the table top 16 is adapted to swing, thus no uneven motion will be imparted to the table top.

It will be understood that the invention may be modified and constructed for use as a bed, desk, benches and various other kinds of furniture to be used on ship-board.

While I have shown and described the preferred form of my invention it will be obvious that various changes in the details of construction and in the proportions may be resorted to for successfully carrying my invention into practice without sacrificing any of the novel features or departing from the scope thereof.

What I claim is:—

1. In a device of the character described, the combination of vertically disposed spaced standards, outwardly extending flanges formed upon the lower ends of said standards whereby the same may be easily secured to the floor or deck of a vessel, bearing plates secured to the inner sides of said standards and spaced therefrom, a curved bearing surface formed upon the upper edges of said bearing plates, a top having end pieces pivotally secured to the upper ends of said standards, transverse blocks arranged beneath each end of said top, rollers carried by said blocks and adapted to bear upon the curved upper edge of the bearing plates, a weight disposed beneath the top, a flexible element connecting said weight at a central point to each side of the top.

2. In a device of the character described, the combination of vertically disposed spaced standards, bearing plates secured to the inner sides of said standards, curved bearing surfaces formed upon the upper edges of said bearing plates, a longitudinal brace bar having its ends mounted in said standards, brace rods having one of their ends secured to the intermediate portion of said brace bar and their other ends secured to the lower ends of the standards, a table top having vertically disposed end pieces pivotally secured to the upper ends of the standards, transverse blocks secured to each end of said top on the under side thereof, rollers journaled in said blocks and adapted to bear upon the curved surfaces of the bearing plates, a weight disposed beneath the top, and flexible elements connected to said weight at a central point to each side of the top.

3. In a device of the character described, the combination of vertically disposed spaced standards, outwardly extending flanges formed upon the lower ends of said standards whereby the same may be secured to the floor or deck of a vessel, bearing plates secured to the inner sides of said standards, curved bearing surfaces formed upon the upper edges of said plates, a longitudinal brace bar having its ends secured to said standards, brace rods having one of their ends secured to the central portion of the brace bar and their other ends secured to the lower ends of the standards, a top having vertically disposed end pieces pivotally secured to the upper ends of the standards, transverse blocks secured to the under side of the top and arranged at each end thereof, rollers journaled in said blocks and bearing upon the curved surfaces of the bearing plates, a weight disposed beneath the top, and a flexible element connecting said weight at a central point to each side of the top.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

WILLIAM HARTLEY.

Witnesses:
JOSEPH S. BRANDLEY,
ALBERT BRANDLEY.