B. K. BURNS.

SELF LEVELING TABLE.

APPLICATION FILED MAY 13, 1910.

990,631. Patented Apr. 25, 1911.

Fig. 1.

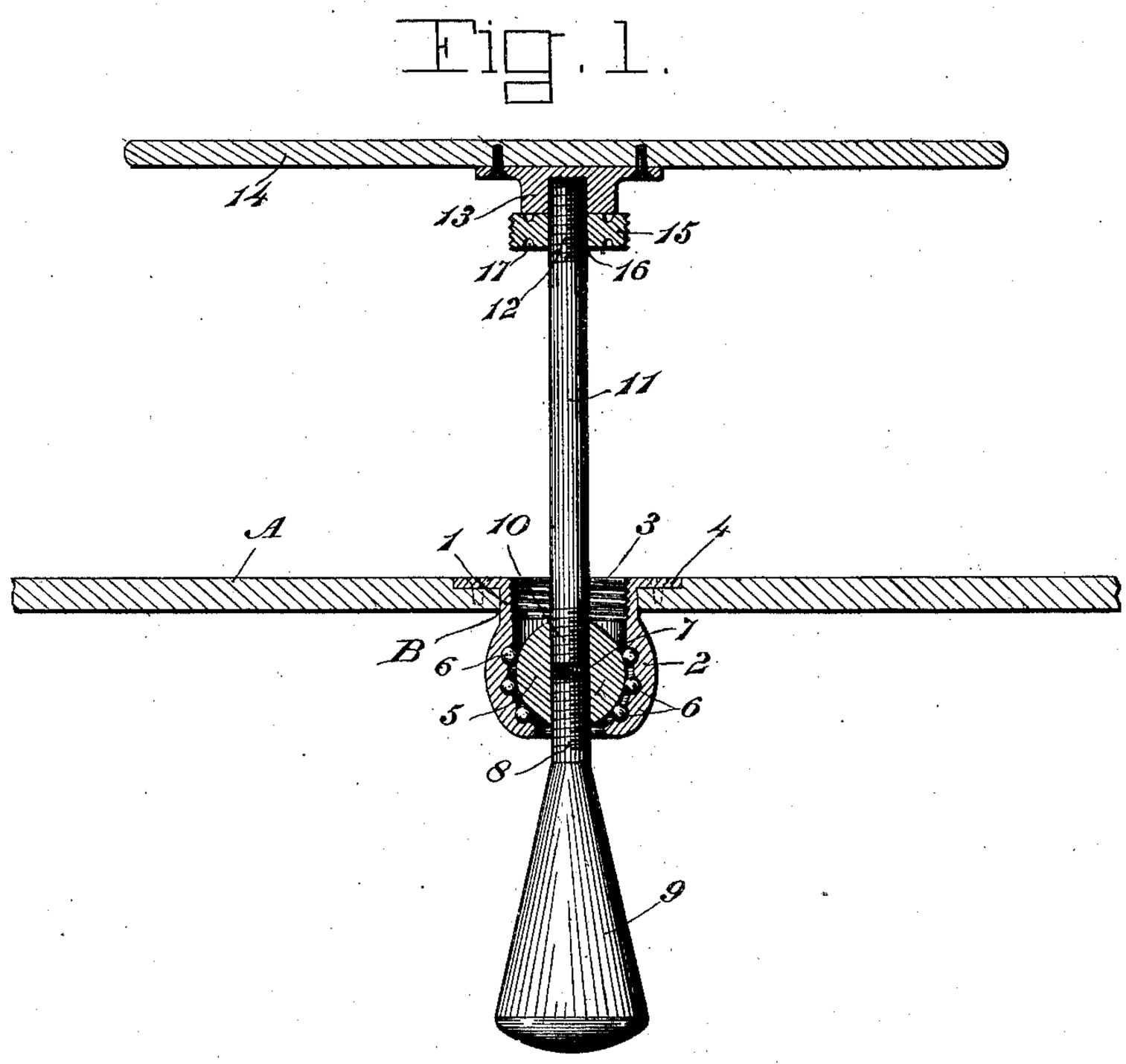


Fig 2

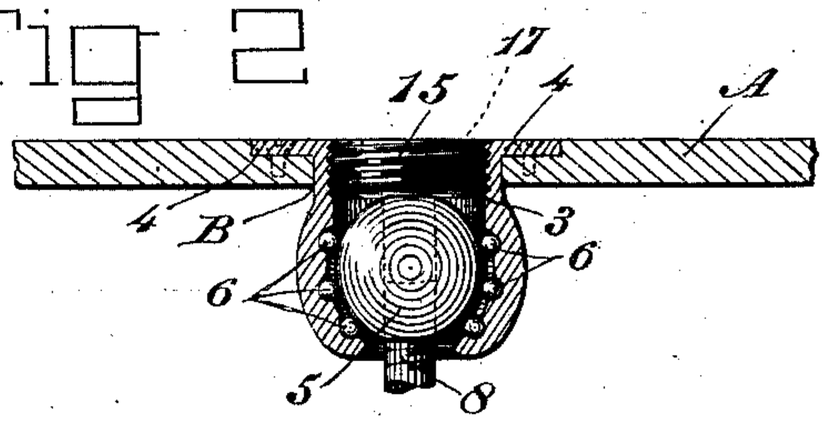
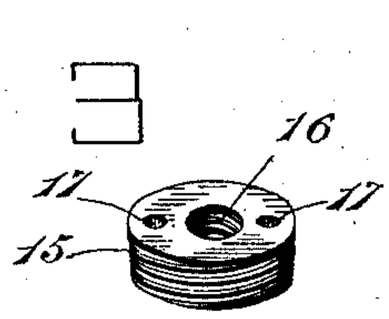


Fig 3



Witnesses

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SELF-LEVELING TABLE.

990,631. Specification of Letters Patent. Patented Apr. 25, 1911.

Application filed May 13, 1910. Serial No. 561,098.

To all whom it may concern:

Be it known that I, BERTIE K. BURNS, a citizen of the United States of America, residing at Lineville, in the county of Wayne and State of Iowa, have invented new and useful Improvements in Self-Leveling Tables, of which the following is a specification.

This invention relates to self-leveling tables, and has for an object to provide a table of this character designed especially for use upon ocean vessels or movable vehicles where it is desirable to obtain a constant level of the table top regardless of the inclination of the deck of the vessel.

A still further object of the invention is to construct a table of this character that can be applied directly to the deck, the latter serving as a support, and I contemplate the provision of means whereby when it is desired to obtain a very broad or large floor surface the table can be conveniently removed, a closure being provided for filling the bearing opening in the deck.

In the drawing, forming a portion of this specification and in which like numerals of reference indicate similar parts in the several views:—Figure 1 is a vertical section through a portion of the deck showing my table applied thereto, parts being in section to clearly illustrate the invention. Fig. 2 is a detail section through a portion of the deck showing the table removed. Fig. 3 is a detail perspective view of the combined plug and jam nut.

A represents a deck of an ocean steamer, the said deck having formed therein a vertical passage B in which is fitted the cylindrical portion 1 of a socket member 2. The cylindrical portion 1 of the said socket member is interiorly threaded, as shown at 3, for a purpose to be hereinafter described. This cylindrical part of the socket member is formed with a horizontal flange 4 which is countersunk in the deck, as illustrated, and secured thereto by any suitable well known fastening devices. The socket member has fitted therein a spherical body 5 whose surface contacts with antifriction bodies 6 which are mounted in suitable raceways in the socket member. The said spherical body is formed with a threaded passage 7 in which is fitted the upper threaded shank portion 8 of a counterbalancing weight 9 and the lower threaded portion 10 of a support 11. This support 11 is in form preferably of a cylindrical rod having a threaded upper extremity 12 which is fitted in a correspondingly threaded socket 13 on the underside of the table top 14. A combined plug and jam nut 15 is formed with a threaded aperture 16 for receiving the upper threaded portion 12 of the support 11. This element of the table may be operated to bear against the lower surface of the socket member 13 to hold the same operatively positioned on the support and to prevent it from accidentally working loose therefrom.

The construction of the support 11 and the manner of connecting the same with the spherical body 5 is such that the former may be removed from the latter when it is desired to obtain a very broad and uninterrupted floor space. When the support 11 is removed from the spherical body 5 the element 15 of the support can be removed therefrom. This element is threaded exteriorly so that it can be fitted in the threaded portion 3 of the socket member. Suitable passages 17 are formed in the upper surface of the element 15 so that it can be manipulated conveniently by any well known form of tool. It will be seen that when the element 15 is operatively associated in the socket member it may be adjusted so as to cause its upper surface to lie flush with the surface of the deck.

The construction of the table is such that the top thereof will always be level regardless of the inclination of the deck.

While the structure broadly described is designed particularly as a table it is of course obvious that the support 11 can be operatively connected with any other object in lieu of the table top 14. For instance, the support may be operatively connected with a bed or the like.

I claim:—

The combination with a support, of a socket member depending therefrom and open throughout and formed to provide an interiorly threaded portion, a counterbalancing weight movably supported by the

socket member, a lock nut of plug form exteriorly threaded for engagement in the interiorly threaded portion of the socket member, a movable support detachably engaged with the said counterbalancing weight and provided at one end with a table top, the said movable support having a threaded portion beneath the said table top and designed to receive the lock nut when the same is disengaged from the socket member.

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

BERTIE K. BURNS.

Witnesses:
J. E. KESTERSEN,
W. A. BETTIS.