

(No Model.)

A. A. YOUNG.  
SELF LEVELING BERTH.

No. 264,052.

Patented Sept. 5, 1882.

Fig. 1.

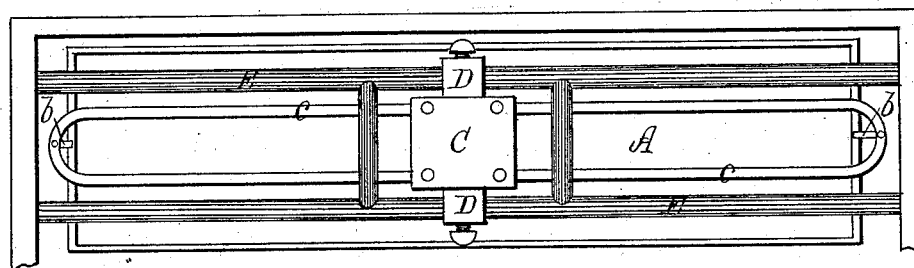
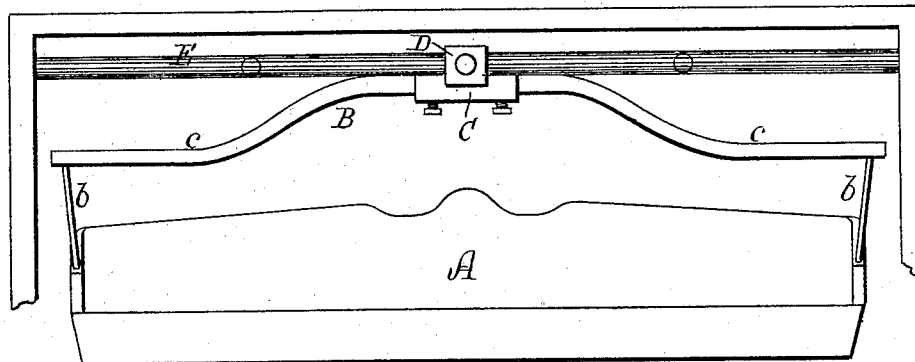


Fig. 2.

Fig. 3.

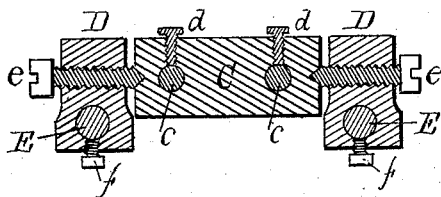


Fig. 4.

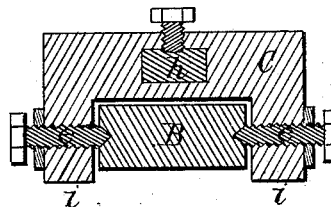


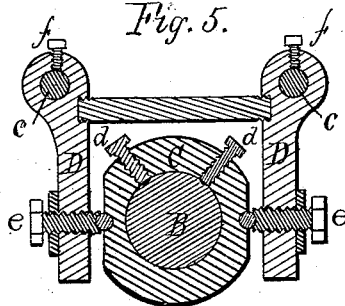
Fig. 6.



Fig. 7.



Fig. 5.



Witnesses.

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ALBERT A. YOUNG, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE MILLER BERTH AND LIFE SAVING MATTRASS COMPANY, OF NASHUA, N. H.

## SELF-LEVELING BERTH.

SPECIFICATION forming part of Letters Patent No. 264,052, dated September 5, 1882.

Application filed March 11, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, ALBERT AUGUSTUS YOUNG, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Self-Leveling Ships' Berths; and I do hereby 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

The object of this invention is mainly to avoid undue friction upon the pivots or bearings of the main support of a self-leveling berth, and as a consequence to permit of free oscillating movement of the berth at any angle the supports of the berth may assume, whether permanently by the disposition of the oscillating beam which constitutes such main support, or temporarily by the rolling or pitching of the vessel; and, secondarily, to provide means for equipoising the berth to the person of the occupant.

My improvements consist in supporting the main oscillating beam upon a cross-head in such manner as to be longitudinally adjustable upon the latter, and in supporting the said cross-head, in turn, adjustably upon its supports, the object of this being to enable the point of suspension or center of oscillation of the berth to be varied to equipoise the berth to the person for the time occupying it, and to reduce the friction between the beam and its point of oscillation to the lowest possible point.

The drawings accompanying this specification represent, in Figure 1, a front view, and in Fig. 2 a plan, of a self-leveling berth containing my improvements, while Fig. 3 is a cross-section of the same. Figs. 4 and 5 represent modified constructions of the support, and Figs. 6 and 7 modified forms of construction of the set-screws for adjusting the amount of friction on the bearings.

In the above drawings, A represents a ship's berth or lounge, pivoted at each end to the lower end of an upright hub or bar, *b*, the up-

per end of which is secured rigidly to one end of a horizontal oscillating beam, B, which, in the present instance, is an open one, composed of two side bars, *c c*, joined at the ends. The bars *c c* of the beam B extend through a horizontal cross-head, C, and are confined to the latter by set-screws *d d*, or their equivalents, by which means the relative positions of the beam and cross-head may be varied longitudinally of such beam. To support the beam B in position, I employ two conical-pointed pivots, which are screws or bolts, *e e*, passing through the upper part of blocks or carriers D D, such blocks being supported and adapted to slide upon two parallel horizontal bars or guides, E E, which are disposed above the berth A, and are firmly secured at their ends to the walls of the state-room or the supports of the berth, whatever they may be, each block D being confined to its bar E by a set-screw, *f*.

It is very desirable in these self-leveling ships' berths that means should be provided for enabling the balance or equipoise of the berth to be adjusted to the proportions of the occupant. To accomplish this by simply shifting the position of the pivot of the beam is not practicable, as a state-room is not large enough to permit of it. Hence it becomes necessary to provide a compound pivot or point of suspension by which the pivot may be changed, while the berth remains stationary. This is readily accomplished by connecting the beam B adjustably to the cross-head C and pivoting the cross-head, in turn, adjustably to the bars E E.

It will be obvious that if the cross-head C and beam B be tilted out of a horizontal position, whether, as before stated, permanently or temporarily, by the rolling or pitching of the vessel, the friction upon the pivots *e e* will be but slightly increased. It will also be seen that but little labor is required to equipoise the berth to the person of the occupant.

A modified construction of the device is shown in Fig. 4 of the drawings, in which the cross-head C is supported adjustably upon a horizontal bar, *h*, or two parallel bars, while the beam B is disposed between two ears, *i i*,

pendent from the cross-head, the pivots *e e* being screwed through the said ears to permit of the necessary longitudinal adjustment of the cross-head, a series of pockets being formed  
5 in the sides of the cross-head to receive such pivots. This modification will form the subject-matter of another application for Letters Patent, and will be claimed therein.

I claim—

10 In combination, the beam B, secured adjustably to the cross-head C, and constituting

at its ends the suspensory of the berth A, and the blocks D D, mounted adjustably upon the bars E and supporting the pivots *e*, which in turn support the cross-head C, substantially as 15 described.

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

ALBERT AUGUSTUS YOUNG.

Witnesses:

H. E. LODGE,  
F. CURTIS.