(No Model.)

D. PARKS.

AUTOMATIC LEVELING SHIP'S BERTH.

No. 472,070. Patented Apr. 5, 1892.

Fig. 1.

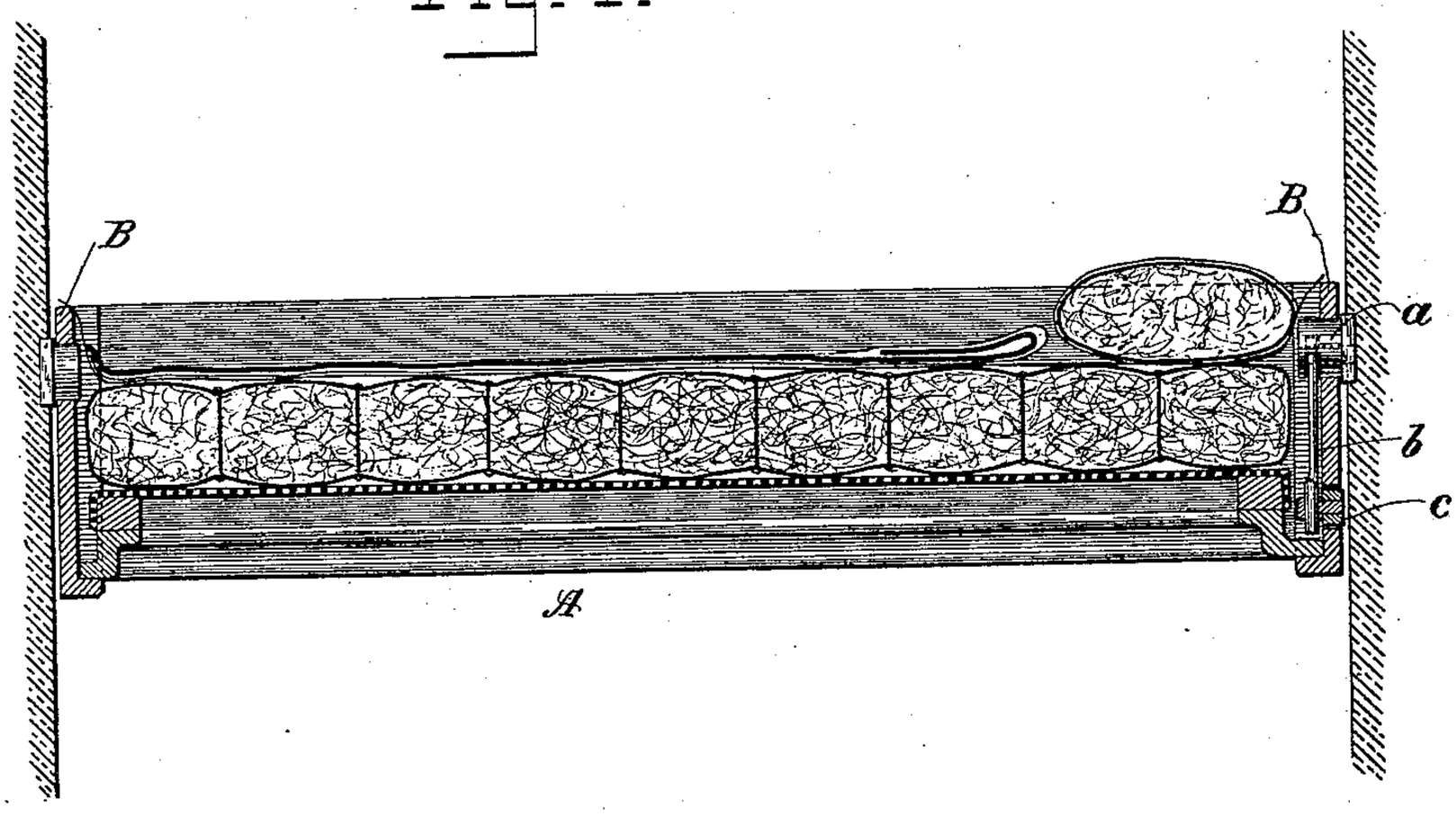
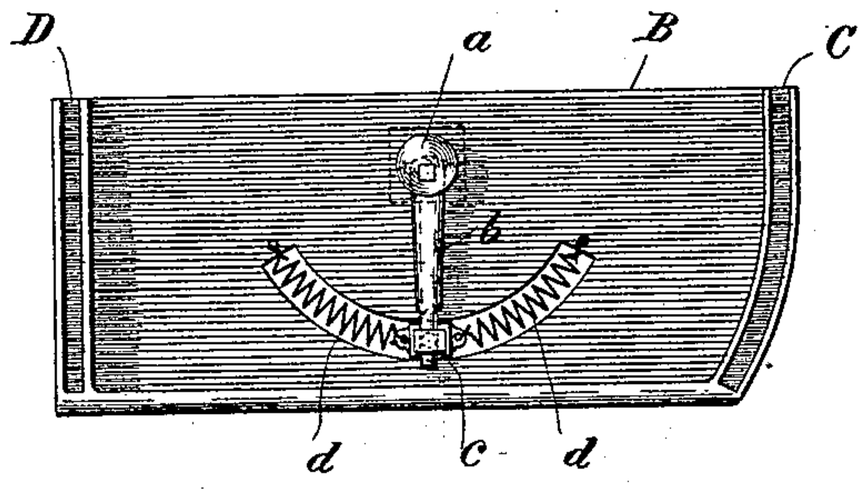


Fig. 2.



Witnesses
John F. Nelson.
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UNITED STATES PATENT OFFICE.

DANA PARKS, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF FOUR-FIFTHS TO MARK STONE, CHARLES H. SCOFIELD, HARRY GOLDBERG, AND BRAINARD A. ANDREWS, OF SAME PLACE.

AUTOMATIC LEVELING SHIP'S BERTH.

SPECIFICATION forming part of Letters Patent No. 472,070, dated April 5, 1892.

Application filed July 21, 1891. Serial No. 400,237. (No model.)

To all whom it may concern:

Be it known that I, DANA PARKS, 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 Automatic 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.

Before my invention automatic leveling ships' berths have been made, some with weights underneath the berth and hung from the ceiling, and in other ways, but not successfully. By my improvement no weights are required, and the weight of the body with the springs used produce the proper equilibrium at less expense and more simply and effectually.

In the drawings, Figure 1 is a vertical longitudinal section of the berth. Fig. 2 is an inside view of the head of the berth.

A indicates the frame of the berth, comprising the head and foot boards B, the lee board C, and the back board D, the head and foot boards being preferably made of malleable iron.

Secured to the end walls of the state-room are trunnions or journals made in the form of short studs *a*, which pass through suitable holes or openings made in the head and foot boards, these studs or journals forming trunnions upon which the berth may oscillate or swing. Secured to the stud or studs *a* is an arm *b*, which extends downwardly and is provided at its lower end with a block *e*, the said arm fitting within a curved slot in the headboard. Springs *d d*, secured at their outer ends to the berth and at their inner ends to the arm *b*, are located one on each side of the said arm, and preferably, but not necessarily, within the curved slot.

The berth is mounted upon the trunnions and jointed together without reference to the lines of the state-room, the construction herein shown and described enabling the berth to be fitted into any state-room irrespective of its lines or the shear of the ship, thereby reducing the cost of construction and simplifying the fitting.

The purpose of the springs is to prevent the too easy turning or oscillation of the berth in entering it. The weight of the body, operating in conjunction with the springs, serves to preserve the desired equilibrium of the berth when the vessel rolls.

I usually make the length of the berth about one inch less than the length of the state-room, so as to permit free oscillation. The mattress, which may be the mattress in common use on steamers, is placed on an ordinary spring bed-bottom, thereby insuring a free circulation of air. The lee board now in common use may also be employed.

Having thus described my invention, what I claim is—

1. In combination with the oscillating berth pivoted in the direction of its longitudinal axis, a fixed arm projecting from the stud or journal on which the berth swings, and springs extending from the arm to the berth on opposite sides of the said arm.

2. In combination with the pivoted berth, studs or journals upon which the berth may oscillate, an arm projecting from one of the studs and provided at its lower end with a block working in a curved slot in one end of the berth, and springs connected at one end with the arm and at their opposite ends with the berth.

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

DANA PARKS.

Witnesses:
GEORGE E. BETTON,
JOHN F. NELSON.