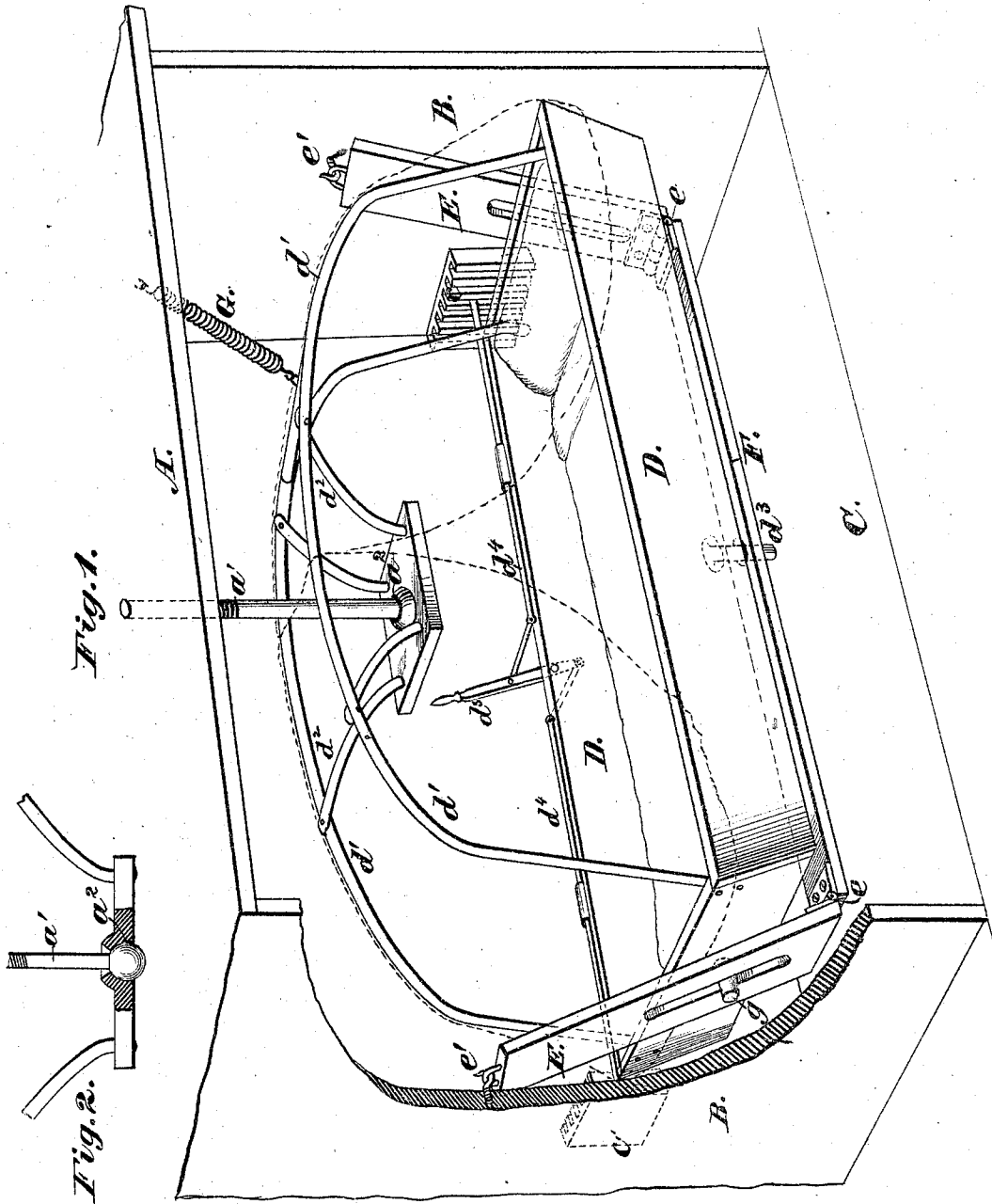


I. A. CHOMEL.
Oscillating Berths for Ships.

No. 140,014.

Patented June 17, 1873.



Witnesses.

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ISAAC A. CHOMEL, OF NEW YORK, N. Y.

IMPROVEMENT IN OSCILLATING BERTHS FOR SHIPS.

Specification forming part of Letters Patent No. 140,014, dated June 17, 1873; application filed April 23, 1873.

To all whom it may concern:

Be it known that I, ISAAC ANTOINE CHOMEL, of the city, county, and State of New York, have invented certain new and useful Improvements in Suspended 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates generally to certain improvements upon the original device for which I obtained Letters Patent, dated August 27, 1872; and consists in modifications in the suspending apparatus by which the oscillations due to the motions of the vessels are reduced, and consequently less space is required for the berth, while the free space over the berth itself is increased; and consists in suspending the berth by a universal joint upon the end of a fixed rod, bringing the point of suspension as low and as near the center of gravity as is practicable, and still allow the suspended berth to move in any direction under it. It also consists in combining with this mode of suspension, a rigid suspension frame attached to the berth and extending above the point of suspension, which obviates the necessity of guy-rods, and, together with the articulated frame, makes a more perfect suspension with less horizontal oscillations than has ever before been produced.

In the drawings, Figure I is a perspective view of the berth as hung in a state-room, and Figure II a detailed view of the point of suspension.

A represents the ceiling, deck, or bottom of an upper fixed berth, O the floor, and B B sides of the cabin or state-room. a' is a bolt firmly fixed to the ceiling and terminates at the bottom by a ball-and-socket or other universal joint, from which the berth is suspended. D is a single berth supported by the stiff suspension frame d^1 d^1 firmly attached to its head and foot. Said frame extends above the universal joint, and is connected with it by arms d^2 d^2 , thus allowing more space

above the berth and around the point of suspension. A looking-glass can be placed, with a falling cover, to be used as a book-rest, shelf, or other purpose, upon the point of suspension if desired. To the upper horizontal bars of the suspension frame d' curtains can be suspended, as shown in dotted lines, and be detached from the vessel, following the movements of the berth, and, by interrupting the view of the sides of the cabin, contribute materially to remove one of the main causes of sea-sickness. To the bottom of the berth or platform is fastened a projecting rod, d^3 , the lower end of which passes through a hole in the lower bar F of the articulated frame, and replaces, in some cases, the guide-bar described in my original said patent. The berth can, of course, be so constructed as to be transformed into a chair; or it may be replaced by a platform to be occupied by passengers, or goods such as glass-ware or crockery, &c; or a whole cabin can be suspended in the same manner. d^4 is a horizontal double bolt worked by an eccentric or link motion produced by a vertical lever, d^5 , and which, when extended, enters the sides of the cabin or grooves made therein, and keeps the bed stationary until released at the will of the occupant of the berth. The articulated frame E E and F, having its three limbs hinged at e e , instead of hanging from the ceiling, is suspended from the sides of the cabin at e' e' , at points nearly on a level with the point of suspension a^2 of the berth. This disposition diminishes the horizontal oscillations of the bed and saves space. G is a spiral spring attached to the ceiling or sides of the cabin, and to the suspension frame, to counterbalance, to some extent, the unequal weight of the occupant of the berth, and check the too free oscillation of the apparatus.

What I claim as my invention is—

1. The single bolt a^1 , with its lower end a^2 , forming a universal point of suspension lower than the ceiling, and as low and as near the center of gravity as is practicable, in combination with a berth constructed and operating substantially as and for the purpose herein described.

2. The berth D, provided with a stiff suspension frame d^1 , and adapted to be suspended from a universal joint, substantially as herein described.

3. The spring G, in combination with the suspension frame and berth, substantially as and for the purpose set forth.

4. A ship's berth suspended by a universal joint as near the center of gravity as is practicable, within a rigid frame, and guided in its

oscillations by an articulated frame, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 18th day of April, 1873.

I. A. CHOMEL.

Witnesses:

JAS. WALBER,

W. H. WAGNER.