J. CORDUAN.

Water-Mattress for Ships.

No. 211,705. Patented Jan. 28, 1879.

Fig. 1.

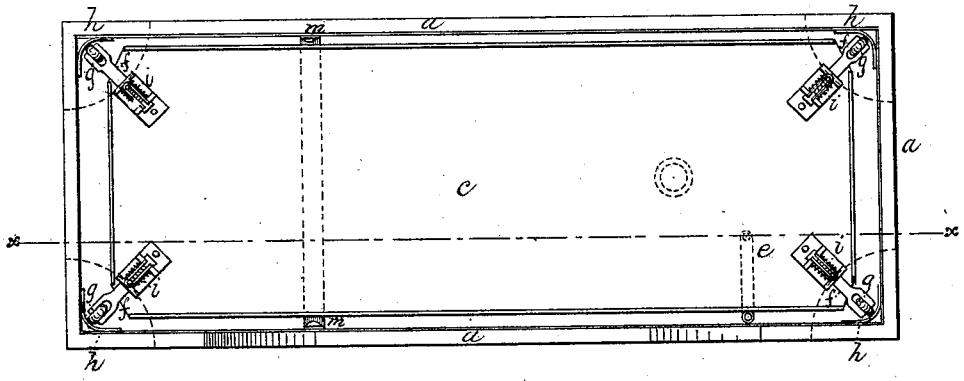
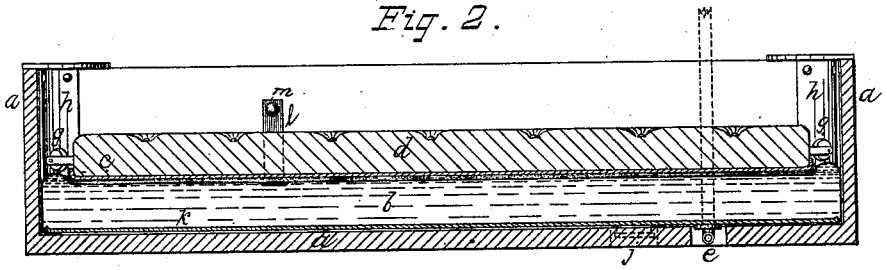


Fig. 2.



ATTEST.

K. Newell.

James H. Hunter

INVENTOR.

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UNITED STATES PATENT OFFICE.

JOSEPH CORDUAN, OF BROOKLYN, NEW YORK, ASSIGNOR TO HIMSELF, FRANK H. CORDUAN, JOHN G. FULLER, AND GEORGE H. FULLER, ALL OF SAME PLACE.

IMPROVEMENT IN WATER-MATTRESSES FOR SHIPS.

Specification forming part of Letters Patent No. **211,705**, dated January 28, 1879; application filed August 12, 1878.

To all whom it may concern:

Be it known that I, JOSEPH CORDUAN, of Brooklyn, in the State of New York, have invented a new and useful Method of Supporting Surfaces on Steamships and other Vessels to prevent travelers from being seasick; and do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the drawings accompanying and forming part of this specification.

The invention has reference principally to a method of supporting surfaces used in steamships to sleep, recline, rest, or stand upon, in order that such surfaces shall preserve their equilibrium notwithstanding the motion at sea of the steamship or other vessel in which such surfaces are placed, and thereby preventing passengers from being seasick; and it consists, first, in a method of supporting such surfaces on flexible or elastic receptacles containing water, or an equivalent medium, in order that the surfaces—such as berths, seats, lounges, and similar articles which it is desired to keep in equilibrium—shall be deprived of motion by reason of their being so insulated, such insulation being effected by the interposition between such surfaces and the remainder of the vessel of said flexible or elastic receptacles; second, in the several combinations and arrangement of apparatus, hereinafter described and referred to as illustrative of the way in which I prefer to practice such method.

In the drawings, Figure 1 is a plan view of a berth constructed according to my improvement, and Fig. 2 is a longitudinal vertical section taken through the line *x x* of Fig. 1.

a is the outer frame or casing of the berth, rigidly attached to the steamer or sleeping-car. *b* is an elastic bag or receptacle, nearly filled with water. This bag extends over the bottom of the berth. On this elastic bag is placed a plate of metal, *c*, which serves as a rigid support on top of such elastic bag for the sleeping surface or mattress *d*. This plate does not extend up to the inner sides of the outer frame or casing, *a*, in order that the matress *d* placed thereon, and which is of substantially the same superficial dimensions, will not touch such sides during the rocking or jarring motion of the steamship or sleeping-car.

The elastic bag or receptacle *b*, when filled, or nearly so, through the pipe *e*, will, because of its elastic character, tend to give the plate *c* and its mattress *d* a level position, no matter which side of the berth is elevated or depressed by the motion of the steamship or sleeping-car.

f f f f are bifurcated rods, carrying wheels *g g g g*, which impinge against vertical ways *h h h h* placed in the four corners of the berth-frame. Each of these rods is surrounded by a coil-spring, *i*, so that the jar of the movements of the mattress-plate *c* against the sides of the berth-frame may be avoided, and the centrality of the mattress more perfectly preserved.

j is a hole with a screw-cap attached, for the purpose of emptying the elastic bag of water, either partially or wholly, when desired.

The bottom of the elastic bag is composed of a plate of tin metal, *k*, into which the plate *e* and the screw-cap *j* are tapped. By this construction the elastic bag can be moved in or out of the berth-frame by first taking out the front of such berth-frame.

As the upper portion of the body is heavier than the lower portion, I place about one-fourth the distance from one end of the berth an elastic strap, *l*. This strap is attached by its ends to opposite sides of the berth, as shown at *m m*, and passes under the plate *c* and partially supports the latter. By this little arrangement the body is better poised on the bed while the vessel is at rest.

Saloon-floors of steamships and other vessels may be supported or insulated in a similar manner, and thus one of the greatest objections to a sea-voyage—namely, seasickness—overcome.

I claim—

1. The method of supporting a seat, bed, or mattress in steamships or other vessels, to prevent seasickness, by placing such seat, bed,

or mattress on flexible or elastic receptacles containing water, or equivalent medium, substantially as described.

2. The combination of an elastic bag containing water with a plate placed thereon, for retaining a mattress or equivalent article, substantially as described.

3. The combination of the elastic bag with the plate, when such plate is constructed at the four corners with rods, wheels, and springs for operating against ways placed in the corners of the sides of the berth-frame, substantially as described.

JOSEPH CORDUAN.

Witnesses:
K. NEWELL,
JAMES H. HUNTER.