No. 607,815.

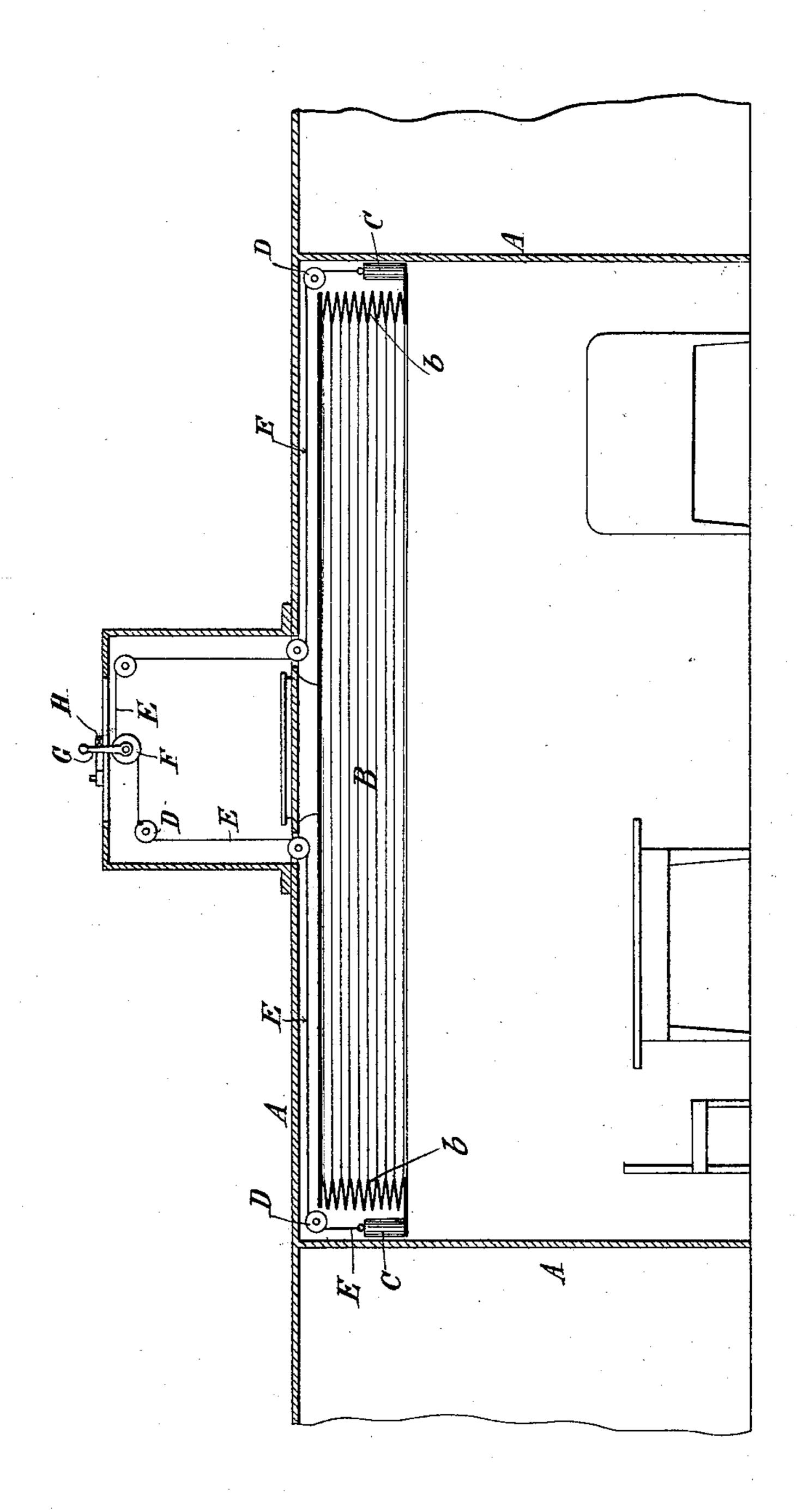
## W. ALEXANDROFF.

Patented July 26, 1898.

## MEANS FOR INCREASING LIFTING CAPACITY OF FLOATING BODIES.

(Application filed Apr. 13, 1897.)

(No Model.)



Witnesses 6. Holloway M. C. Princkney

Warsanophy alexandroff, by JEMMOrmen My.

## United States Patent Office.

WARSANOPHY ALEXANDROFF, OF ST. PETERSBURG, RUSSIA, ASSIGNOR OF ONE-HALF TO ALEXANDER COUMBARY, OF SAME PLACE.

MEANS FOR INCREASING LIFTING CAPACITY OF FLOATING BODIES.

SPECIFICATION forming part of Letters Patent No. 607,815, dated July 26, 1898.

Application filed April 13, 1897. Serial No. 632,039. (No model.)

To all whom it may concern:

Be it known that I, WARSANOPHY ALEXAN-DROFF, a subject of the Emperor of Russia, and residing in St. Petersburg, Russia, have 5 invented certain new and useful Improvements in Means for Increasing the Lifting Capacity of Floating Bodies, of which the following is a specification.

My invention relates to appliances for pro-10 viding within ships of various kinds means for confining large bodies of air in such manner that spaces occupied by the air cannot be entered or seriously encroached upon by water entering the vessel owing to leakage or

15 other accidental causes.

The objects of my invention are to so construct such appliances that the same may be secured on board of a ship in such manner as to take up but a little space and to least in-20 terfere with the utilization of the cabins and compartments of the ship and so that they may be employed and made ready for the service required of them promptly and without the expenditure of much labor or the em-25 ployment of pumps or other machinery. I accomplish these and other useful objects by the means hereinafter specified, and set forth more particularly in the claims.

The accompanying sheet of drawings, form-30 ing part of this specification, represents in cross-section a compartment on board of a ship provided with my improvements.

A A represent the side walls and ceiling of a compartment, and B a cap or hood closed 35 on top and having its top fixedly suspended from the ceiling of the compartment, its sides b being constructed in folds similar to the folds in bellows in such manner that when these sides are straightened out approxi-40 mately their lower edges will closely approach the floor of the compartment, whereby a space may be inclosed within the hood of approximately the same dimensions as that of the compartment itself.

C are weights attached to the lower edges of sides b, and E cords from which said weights are suspended. These cords run from both

sides of the compartment over rollers D to a roller F, provided with a handle G, upon which roller the cords are wound. This handle may 50 be prevented from moving by a catch H. In case the ship should spring a leak it is only necessary to release said catch before the entry of water into the compartment, whereupon the weights C, together with the weight of the 55 sides b of the hood, will expand the latter downward, thus producing a chamber in the interior of said hood from which the air cannot be expelled and which will therefore have a tendency to buoy up the ship and keep it afloat. 60 After the danger is passed the sides can easily be folded up again by revolving roller F and winding cords D upon it, whereby the hood will be again placed in a position near the ceiling, as shown in the drawings, where it 65 will not interfere with the occupancy of the compartment.

I claim as new and desire to secure by Letters Patent—

1. A boat or vessel or other floating struc- 70 ture provided on its inside with an independent float not integral with such vessel or floating structure, the said float being in the form of bellows suspended from the ceiling or walls of the compartment to be protected 75 and adapted to be readily lowered when required.

2. A boat or vessel or other floating structure provided on its inside with an independent float not integral with such vessel or 80 floating structure, said float being in the form of bellows suspended from the upper part of the compartment to be protected, combined with weights normally held in elevated positions and adapted to expand such float 85 when released.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WARSANOPHY ALEXANDROFF.

Witnesses:

N. TSCHEKALOFF,

J. BLAIR.