

No. 854,684.

PATENTED MAY 21, 1907.

J. C. BARR.  
CIRCULAR CONVEYER FOR SHIPS.  
APPLICATION FILED NOV. 6, 1906.

Fig. 1.

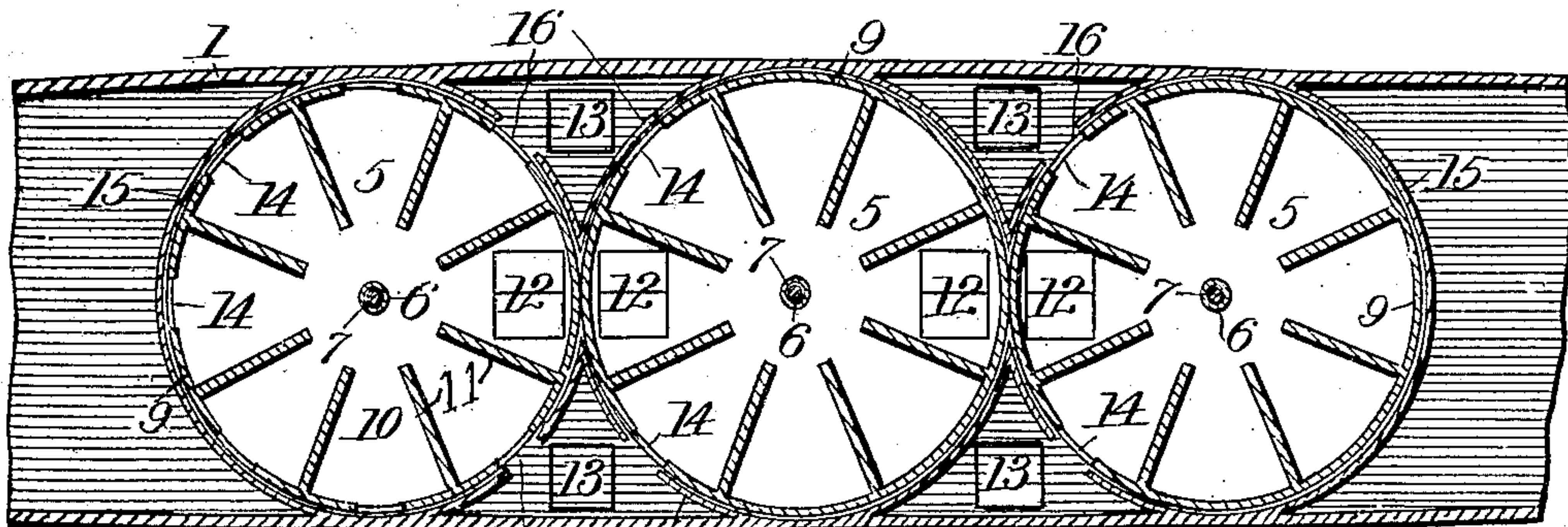
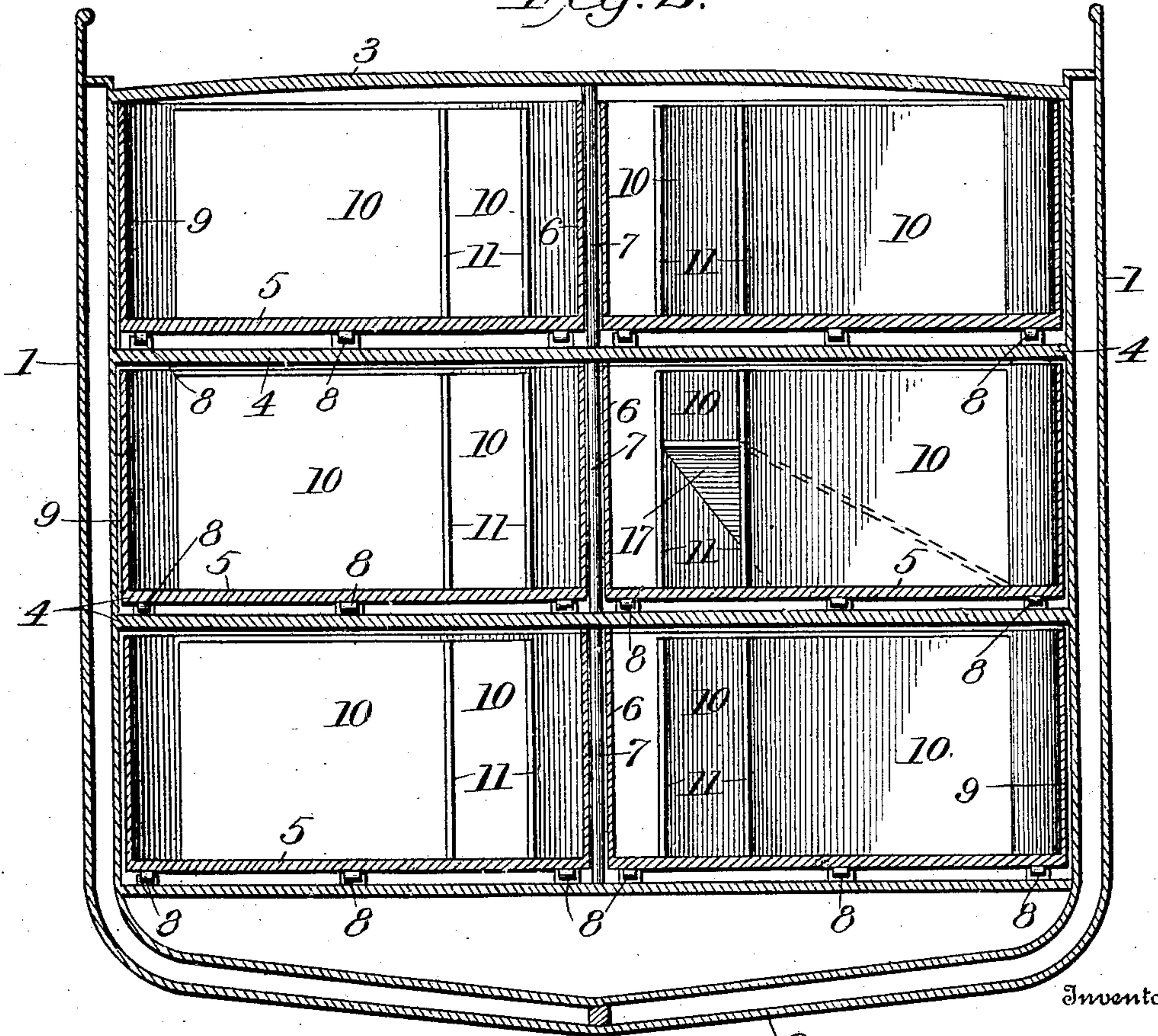


Fig. 2.



Inventor

Witnesses

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# UNITED STATES PATENT OFFICE.

JOHN C. BARR, OF TACOMA, WASHINGTON.

## CIRCULAR CONVEYER FOR SHIPS.

No. 854,684.

Specification of Letters Patent.

Patented May 21, 1907.

Original application filed January 16, 1906, Serial No. 296,418. Divided and this application filed November 6, 1906.  
Serial No. 342,237.

*To all whom it may concern:*

Be it known that I, JOHN C. BARR, a citizen of the United States, residing at Tacoma, in the county of Pierce and State of Washington, have invented new and useful Improvements in Circular Conveyers for Ships, of which the following is a specification.

My invention relates to improvements in the construction of the decks of ships, barges and the like and has for its object to provide a deck or decks of turntable or turret form to allow the easy, quick and complete loading and unloading of a ship; to provide separate compartments for the reception of different kinds of freight destined to different points, and to allow the loading and unloading of each compartment on each deck without disturbing the remainder of the cargo.

To the accomplishment of the foregoing and such other objects as hereinafter appear, the invention consists in the features and combination of parts hereinafter particularly described and then sought to be clearly defined by the claims, reference being made to the accompanying drawing forming a part hereof and in which

Figure 1 is a top plan view of a portion of a ship or barge equipped with my improved form of deck and Fig. 2 is a vertical section of a ship having its lower decks constructed according to my invention.

In the drawing, the number 1 represents the sides, 2 the bottom, 3 the top deck and 4 the lower deck of a ship. Suitably mounted on these decks are supplemental decks or floors 5 of a turret or turntable form, preferably circular and in diameter approximately equaling the width of the deck. As shown these supplemental decks or turrets are provided with central bearings 6 surrounding vertical shafts 7 and are rotated thereon by any suitable means. Antifriction rollers 8 are provided between the supplemental deck or turret and the deck proper. The circular floors or decks 5 are preferably surrounded or inclosed by vertical walls 9 and the inclosed space is divided into separate compartments 10 by the radial upright walls or partitions 11 extending inwardly from the outer walls 9. Hatches 12 are provided in each of the decks 4 and also in the supplemental decks 5 to allow the lowest turret to be filled first. In order to have access to each separate compartment on each deck to allow the loading or unloading of the freight in separate lots or

shipments consigned to different ports without disturbing any other portion of the cargo, hatches 13 are provided to one side of the decks 4 in the angles left between the turrets. The compartments 10 are provided with doors or openings 14 in their outer walls which gives access to the angle spaces.

The entire supplemental deck or floor 5 and its inclosing wall 9 may be surrounded by wall 15 affording additional protection and strength to the construction. Openings 16 are provided in such wall 15 for the removal of freight.

For the shipment of coal, ores, grain, sand or other granular substances, the compartments 10 may be constructed with floors 17 inclined toward the doors or openings 14 in the side walls of the turret which give communication to the side hatches 13. By this construction the contents of the compartment are caused to gravitate toward the hatch when the door is opened and thereby eliminate the necessity of shoveling.

In loading a vessel equipped with my invention the compartments in the lowest deck are first filled, the turret being rotated to bring the compartments separately under the hatches 12 through which the freight is lowered so that the compartments may be successively filled. Then the deck next above is loaded and so on. When the outer walls 9 of the compartments are provided with doors or openings the loading is preferably done by lowering the shipments through the side hatches 13 and storing them in the compartments through the doors thereto. The circular floor is rotated to bring each compartment in line with opening and thus they are all filled. By this construction any compartment or any deck can be filled with freight or unloaded without disturbing the freight in the other compartments. This does away with an immense amount of labor and annoyance and allows quick access to any part of the cargo without sacrificing any storage space.

This is a division of the application filed January 16, 1906, Serial No. 296,418.

Having described my invention and set forth its merits, what I claim is:—

1. In a freight-carrying ship, the combination with a deck, of a supplemental freight supporting flooring or turret capable of rotation for transferring freight from one point to another in the ship, and a hatchway in the



deck above the rotatable flooring for loading and unloading freight to and from said movable flooring through said hatchway.

2. In a freight-carrying ship, a rotatable floor or turret for transferring freight from one point to another in the ship, and separate freight compartments carried by said floor, constructed to permit the loading and unloading of freight to and from one compartment without disturbing the freight in the other compartments.

3. In a ship, a rotatable deck formed with compartments, said compartments having an inclined floor.

4. In a ship, a rotatable deck formed with compartments, said compartments having a floor inclined outwardly from the center.

5. In a freight-carrying ship, a rotatable flooring or deck for transferring freight from one point to another in the ship, a wall inclosing said deck, and partitions extending inwardly from said wall to form separate compartments, said partitions terminating back from the central portion of the deck to form a space through which access may be had to the compartments from the central portion of the deck.

6. In a ship, the combination with the decks, of supplemental decks capable of rotation and hatches in said decks and supplemental decks for access from one deck to the deck next below.

7. In a ship, the combination with the decks, of rotary turrets or floors, walls inclosing said rotary turrets or floors and doors in said walls for access to said turrets.

8. In a freight-carrying ship, the combination with a deck, of a supplemental circular deck or flooring rotatably mounted thereon for transferring freight from one point to another in the ship, and rollers disposed between said deck and supplemental deck.

9. In a ship, the combination with the

decks, of a series of circular floors or turrets rotatably mounted upon said decks, walls inclosing said turrets, and doors in said walls communicating with the space between said turrets.

10. In a ship, the combination with the decks, of a series of circular floors or turrets rotatably mounted upon said decks; walls inclosing said turrets, partitions extending inwardly from said walls forming compartments, and doors in said walls to each compartment, said compartments having floors inclined toward said doors.

11. In a ship, the combination with the decks, of a rotatable circular floor or turret to each deck, an upright wall to the floor or turret formed with openings for access to the space inclosed by the wall, vertical partitions extending inwardly from the wall forming compartments to which access is had through the openings in the wall, and hatchways in the decks and turrets for access from the compartments of one turret or floor to the compartments of the turret or floor next below.

12. In a ship, the combination with the decks, of a series of rotatable circular floors or turrets on each deck, vertical walls to each floor or turret, upright partitions extending inwardly from said walls forming compartments, openings in said walls and hatchways in said decks located in the angular spaces between said circular floors or turrets whereby access is had to each one of said compartments through said openings in the walls.

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

JOHN C. BARR.

Witnesses:

S. H. HIGGINS,

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