B. F. SARGEANT.

LIFE BOAT.

APPLICATION FILED SEPT. 21, 1912.

1,067,277.

Patented July 15, 1913.

8 SHEETS—SHEET 1.

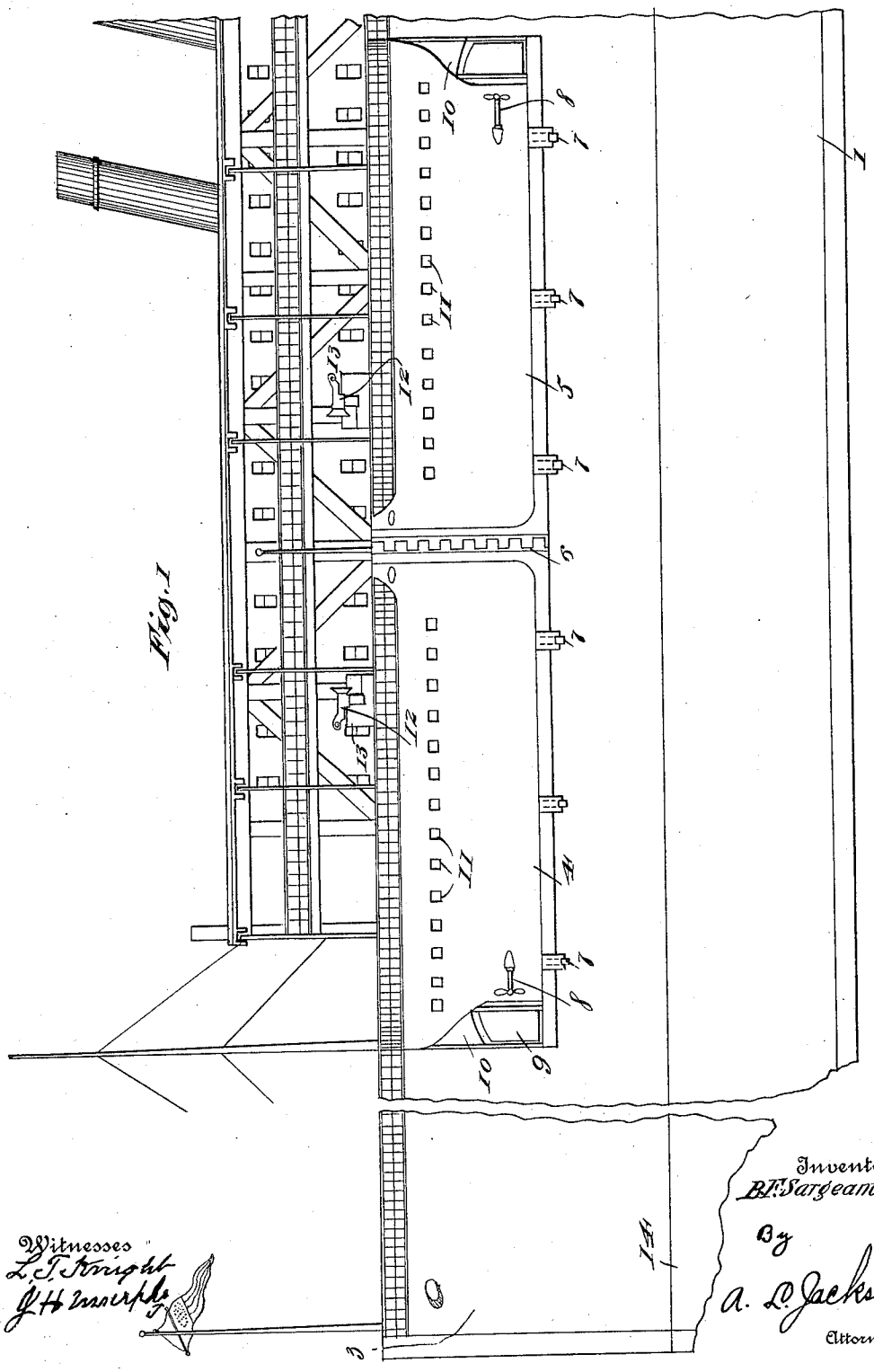


Fig. 1

Witnesses
L. T. Knight
J. H. Inscriple

Inventor,
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By
A. D. Jackson,
Attorney

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

B. F. SARGEANT.

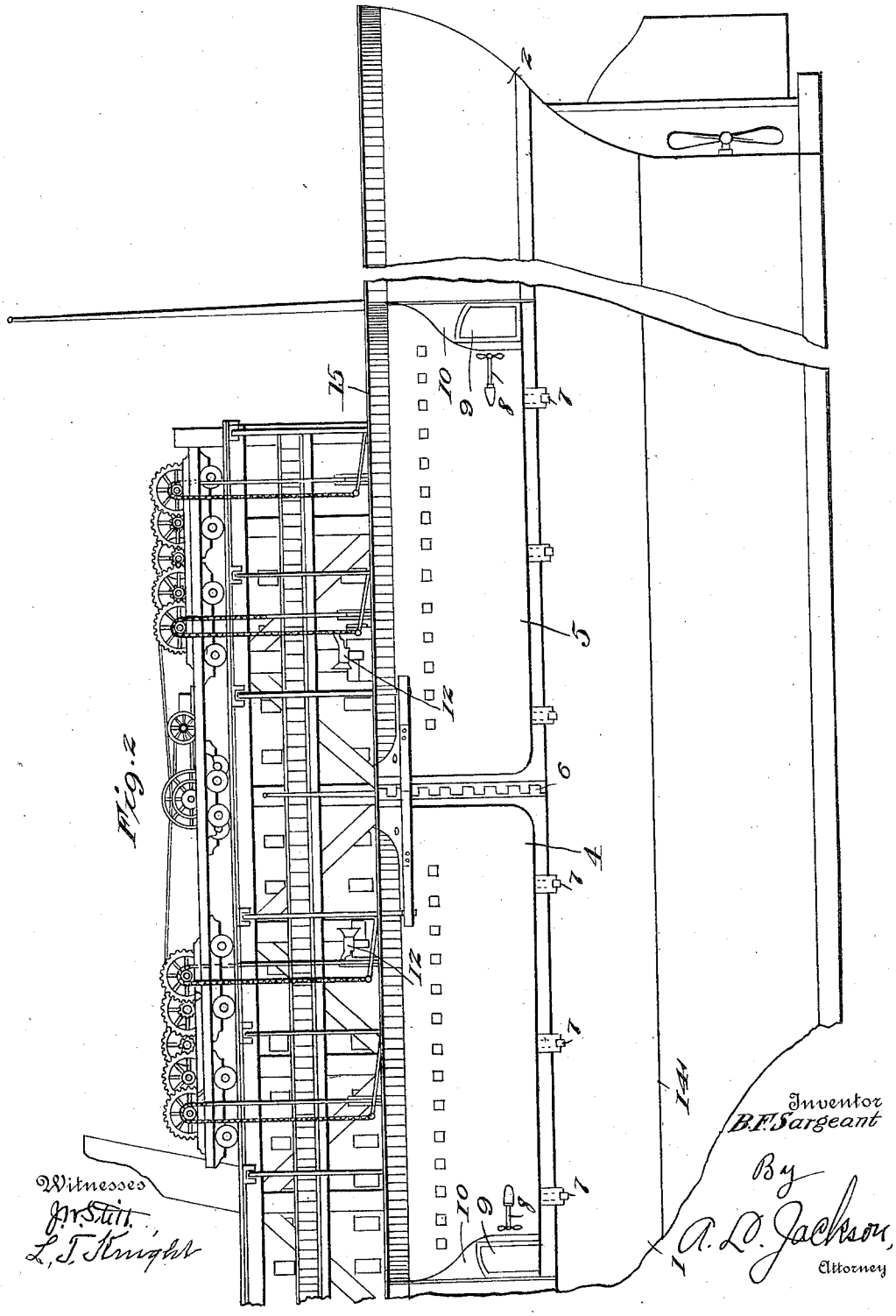
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8 SHEETS—SHEET 2.



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3 SHEETS—SHEET 3.

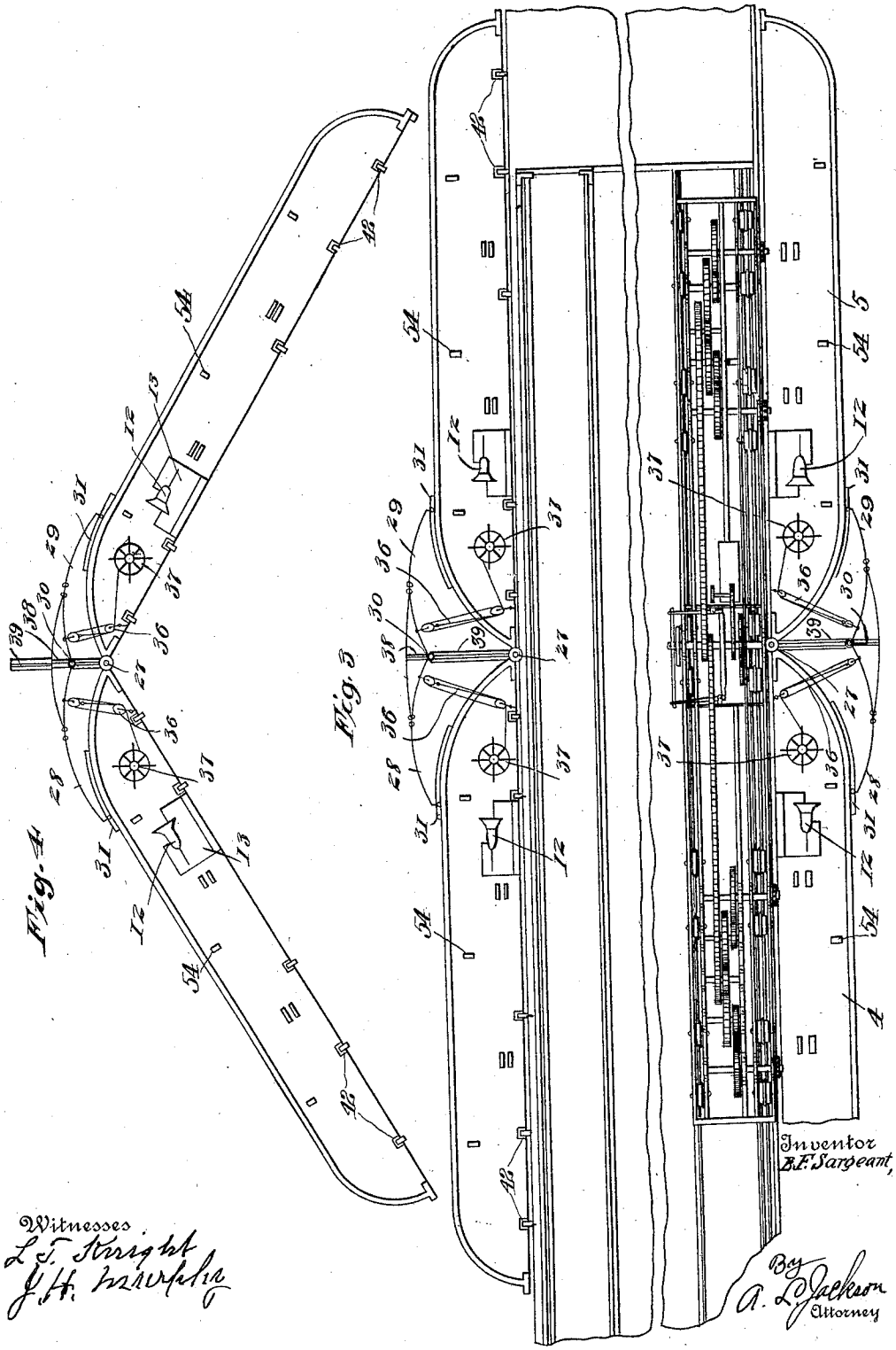


Fig. 4

Fig. 5

Witnesses
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LIFE BOAT.

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1,067,277.

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8 SHEETS—SHEET 4.

Fig. 10

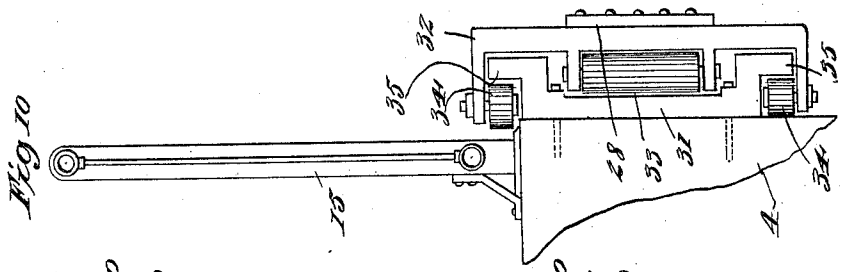


Fig. 5

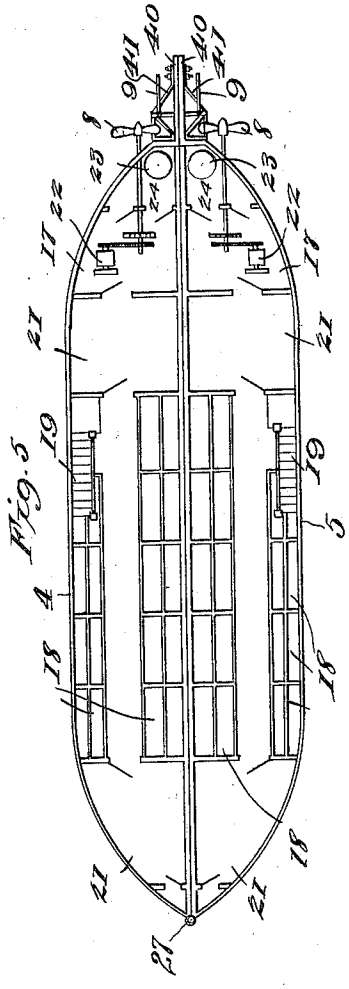
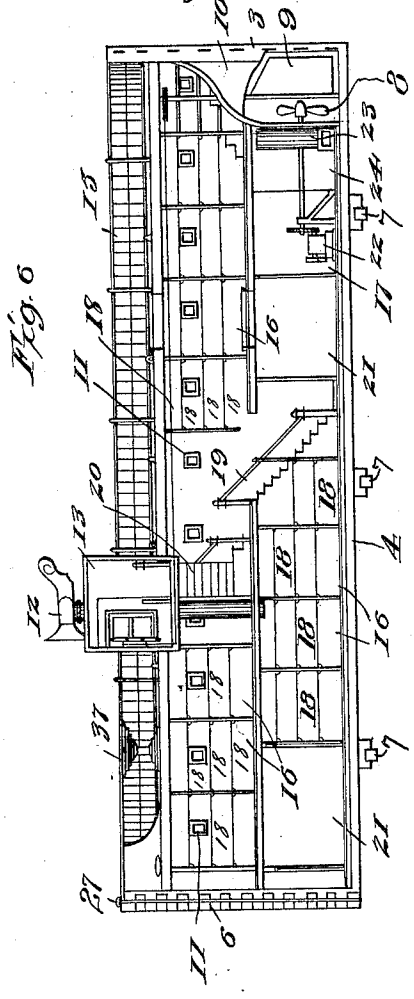


Fig. 6



Inventor

B. F. Sargeant

Witnesses

J. W. Stull.

L. T. Knight

By A. D. Jackson

Attorney

B. F. SARGEANT.

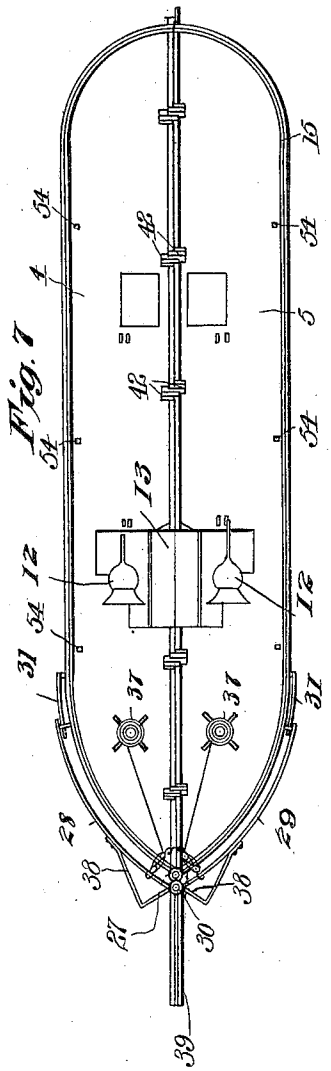
LIFE BOAT.

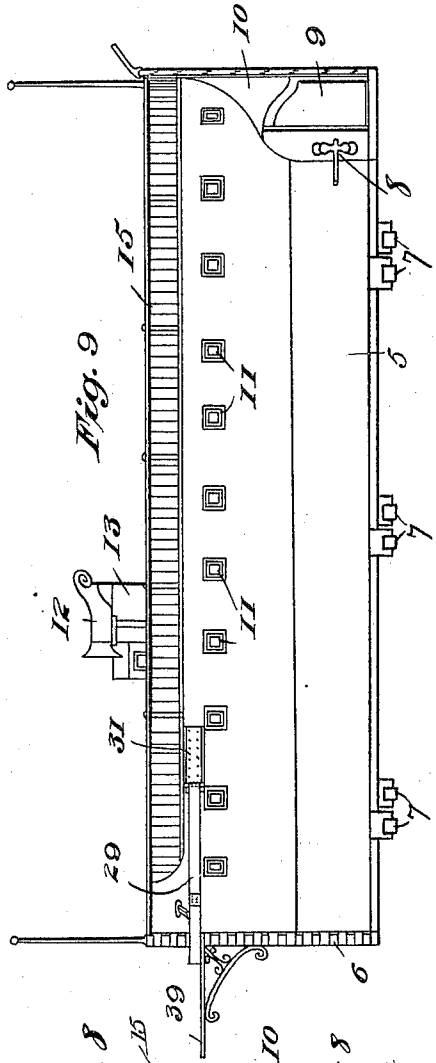
APPLICATION FILED SEPT. 21, 1912.

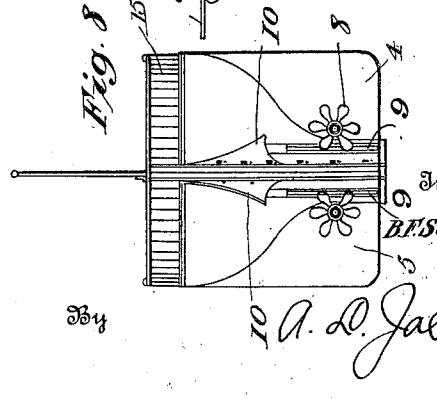
1,067,277.

Patented July 15, 1913.

8 SHEETS—SHEET 5.







Witnesses

J. M. Eddy

L. T. Knight

Inventor

B. F. Sargeant

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COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

B. F. SARGEANT.

LIFE BOAT.

APPLICATION FILED SEPT. 21, 1912.

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Patented July 15, 1913.

8 SHEETS—SHEET 6.

Fig. 11

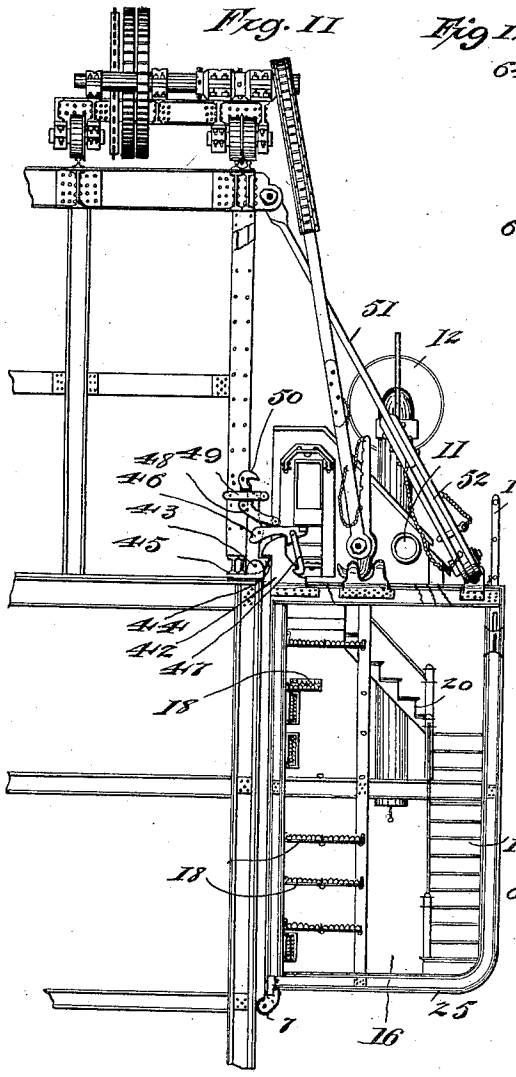


Fig 12

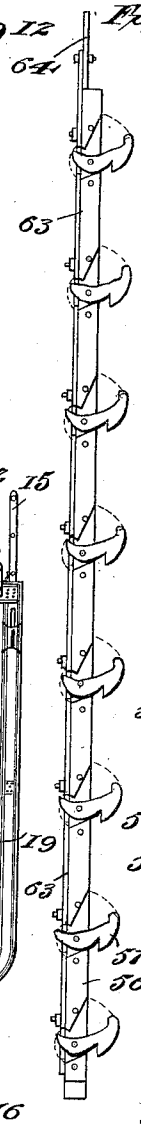


Fig 13

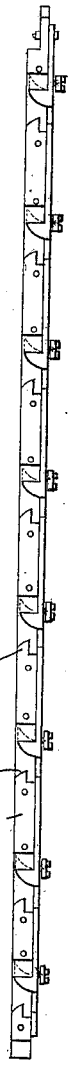


Fig 14

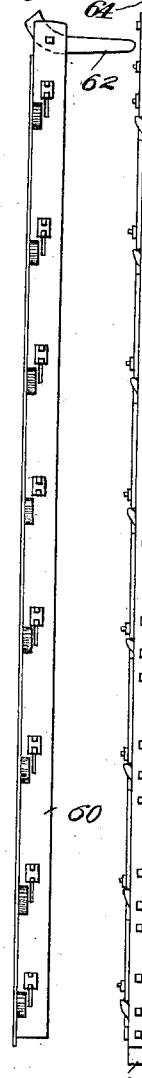


Fig 15

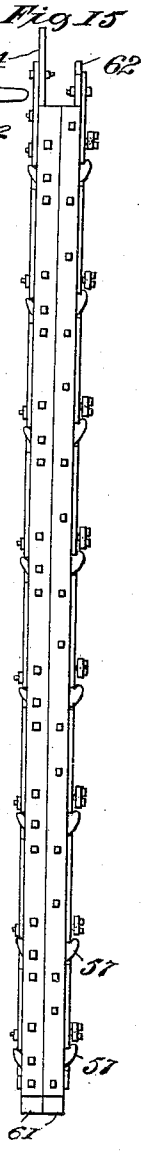
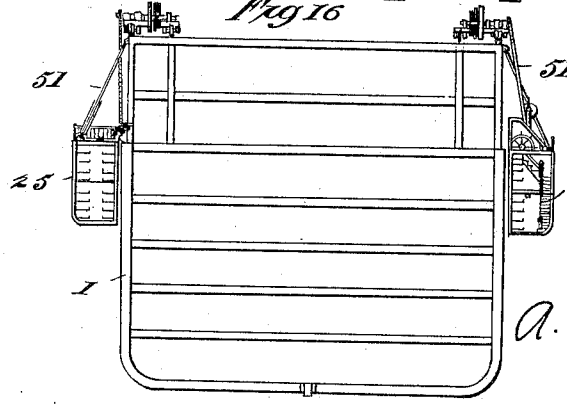


Fig 16



Witnesses

Jno. Ellis.

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B. F. SARGEANT.

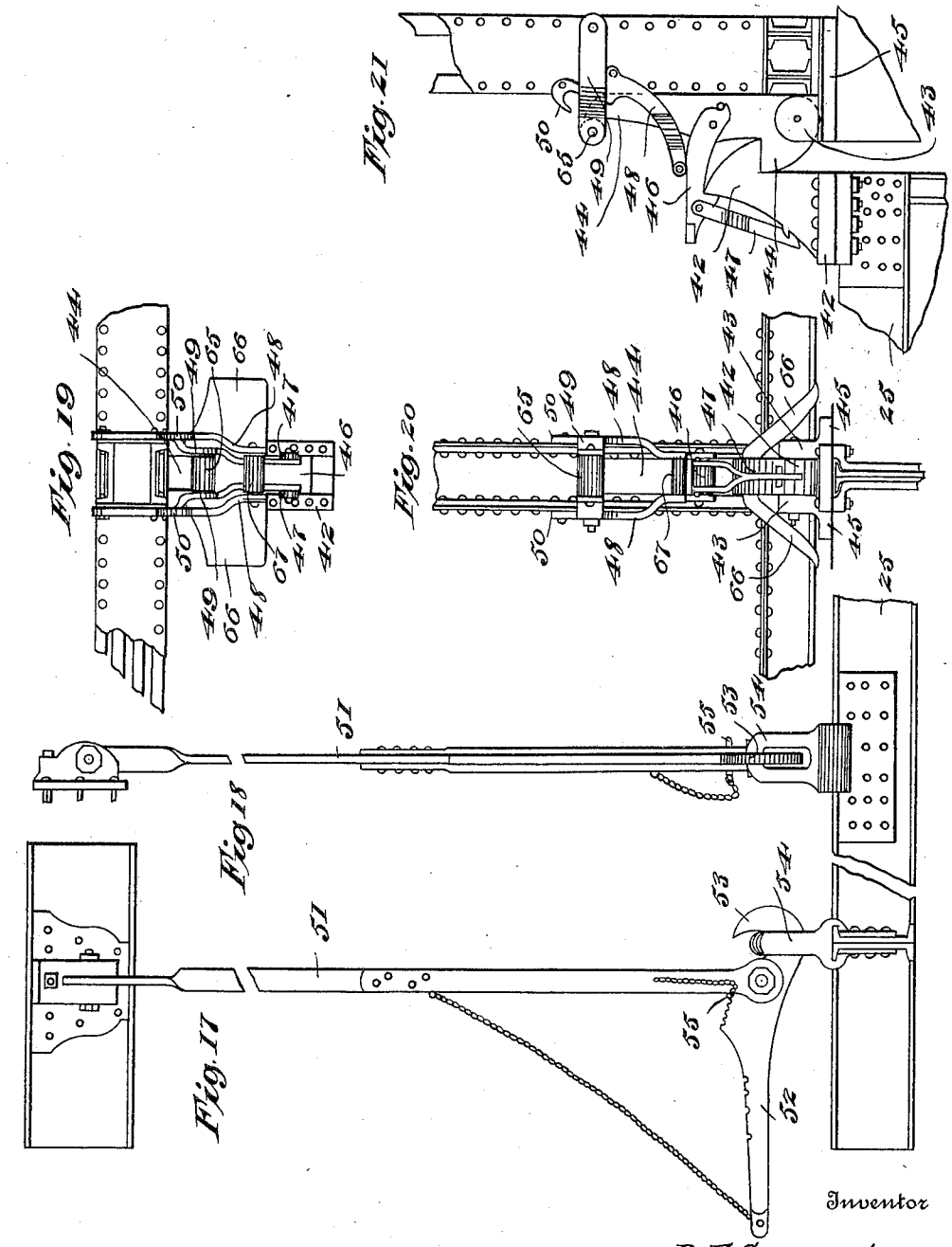
LIFE BOAT.

APPLICATION FILED SEPT. 21, 1912.

1,067,277.

Patented July 15, 1913.

8 SHEETS—SHEET 7.



Witnesses
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LIFE BOAT.

APPLICATION FILED SEPT. 21, 1912.

1,067,277.

Patented July 15, 1913.

8 SHEETS—SHEET 8.

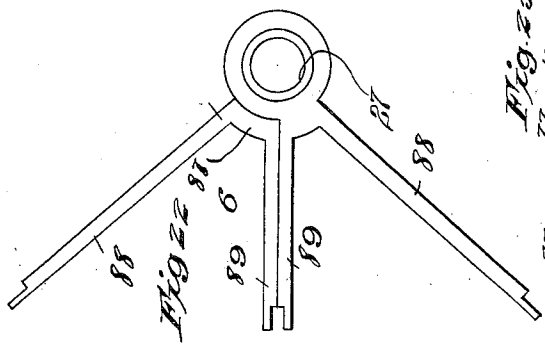


Fig. 22

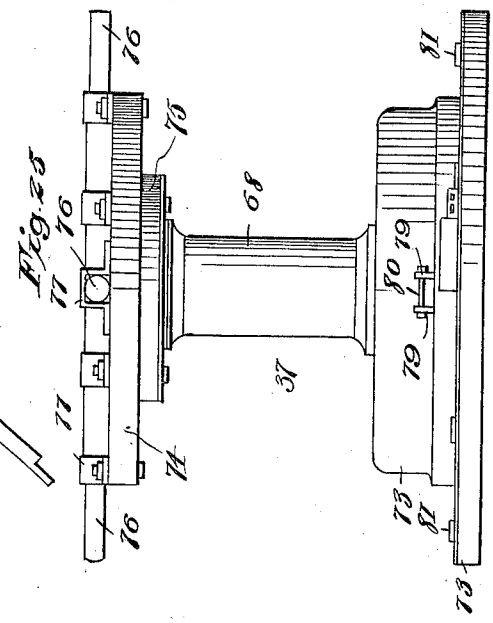


Fig. 25

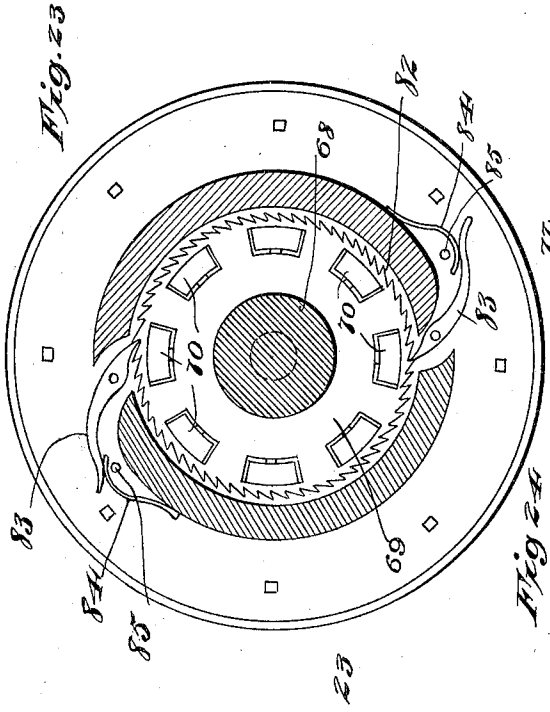


Fig. 23

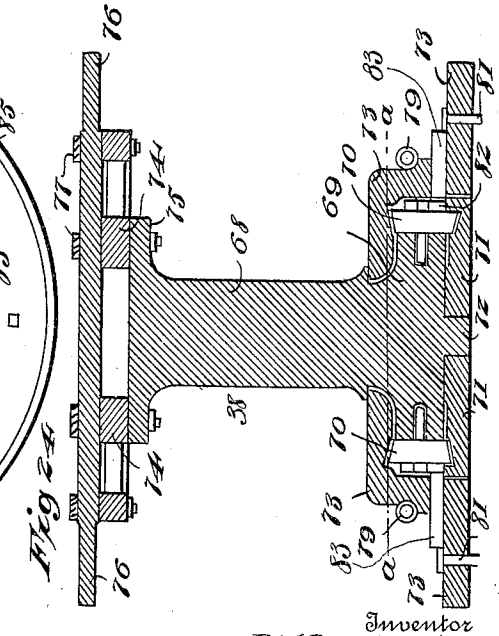


Fig. 24

Witnesses

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L. T. Knight

Inventor

B. F. Sargeant

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COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

BENJAMIN F. SARGEANT, OF FORT WORTH, TEXAS.

LIFE-BOAT.

1,067,277. Specification of Letters Patent. Patented July 15, 1913.

Application filed September 21, 1912. Serial No. 721,554.

To all whom it may concern:

Be it known that I, BENJAMIN F. SARGEANT, a citizen of the United States, residing at Fort Worth, in the county of Tarrant and State of Texas, have invented certain new and useful Improvements in Life-Boats, of which the following is a specification.

My invention relates to life-boats and particularly to life-boats for use on large passenger steamers and also cruisers and other steam ships or boats, and the objects are to provide life boats which can be easily and safely mounted on or attached to the sides of steam ships and which, in case of necessity, can be quickly and easily disengaged from the main ship and easily and quickly launched as independent boats or ships.

Another object is to provide such life boats as can be used for passenger or other purposes even when mounted on the main ship. In other words, the life-boats are so constructed and mounted that passengers can occupy the life boats when the life boats are mounted on the main ship.

The main object is to provide life boats which can be used in case of accident, as sinking or burning of the main ship, for the safety of passengers and for other persons. The life boats are to be constructed with modern conveniences so that passengers can proceed on their journeys in safety and with very little delay.

Other objects and advantages will be fully explained in the following description, and the invention will be more particularly pointed out in the claims.

Reference is had to the accompanying drawings which form a part of this application and specification.

Figure 1 is a side elevation of a part of a main ship, showing one life boat mounted thereon and Fig. 2 is a continuation of the main ship shown in Fig. 1, also showing a life boat mounted thereon. Fig. 3 is a broken plan view of a main ship, showing a life boat on each side thereof, also showing on one side of the deck tracks for hoisting trucks and on the other side tracks and a hoisting truck mounted on the track. Fig. 4 is a plan view of a life boat, showing the two sections in process of being brought together. Fig. 5 is a plan view of the lower deck of a life boat after the two sections are united and showing the location of the engines and the propeller wheels. Fig. 6 is a vertical longitudinal section of one of the sections of a life boat. Fig. 7 is a plan view of a life boat after the sections are formed into a complete boat. Fig. 8 is a stern end elevation of the complete life boat. Fig. 9 is a side elevation of a life boat. Fig. 10 is a detail view of the draw-bars for starting the closing of the two sections of the life boat to form the life boat. Fig. 11 is a vertical cross-section of a life boat and part of the main ship, showing the hoisting mechanism and part of a truck for operating the hoisting mechanism. Figs. 12 and 13 are detail views of the stern posts of two life boat sections, showing the positions of the locking mechanism when two sections are coming together to be locked, the plates being removed to show the locks. Fig. 14 is a side elevation of the locking plate which secures the hooks shown in Figs. 12 and 13 in their locked positions. Fig. 15 shows the two stern posts after they are locked together. Fig. 16 is a vertical cross section of a main boat with side boats in section on each side thereof. Fig. 17 is an enlarged detail view of the hangers which engage the outside edge of the life boats to mount them on the main ship. Fig. 18 is a view of the same mechanism taken at right angles to the view in Fig. 17. Fig. 19 is an enlarged detail plan view of the hooks which engage the edge of the life boat next to the main ship for hanging the life boat on the main ship. Fig. 20 is a side elevation of the same looking toward the main ship. Fig. 21 is a side elevation of the same taken at right angles to Fig. 20. Fig. 22 is a plan view of the hinged bow stem. Fig. 23 is a horizontal section of the capstan, taken substantially on the line *a*—*a* of Fig. 24. Fig. 24 is a vertical section of the capstan. Fig. 25 is a side elevation of the capstan.

Similar characters of reference are used to indicate the same parts throughout the several views.

In Figs. 1 and 2 of the drawings, 1 indicates the main ship, 2 indicates the stern and 3 indicates the bow of the main ship. Only enough of the main ship is shown to show the location of the life boats. In Fig. 1, the outside elevations of two life boat sections 4 and 5 hinged together at the bow 6 are shown mounted on the main ship. The life boat sections are provided with anti-friction rollers 7 to prevent friction against the main ship. The life boat propellers 8

are journaled in the stern portions of the boats. The life boats have rudders 9 and braces 10 above the rudders and port holes 11 and ventilators 12, the ventilators 12 being mounted on the pilot houses 13.

In Figs. 1 and 2, 14 indicates the water line of the main ship. The life boats are provided with railings 15. The life boats are provided with any suitable number of cabins 16 for passengers and officers, engine rooms 17, berths 18, and stair ways 19 and 20, and store rooms 21 are provided preferably on the lower deck. An engine, preferably gasolene, 22 is mounted on each section of the life boat. 23 indicates oil cans in closets 24 to supply the engines.

The life boat sections are hingedly connected together at the bow 6 and means are provided for closing together two sections to form a life boat and to open out the sections when the life boats are to be mounted on the main ship. When the life boat sections are mounted on the main ship, they are opened out with the bow of one section hinged to the bow of the other, and the sections stand in line with each other. The boat sections 4 and 5 are hinged together on a vertical hinge rod 27 which extends from top to bottom of the sections. Draw bars 28 and 29 are hinged together at 30 and conform to the curvature of the boat sections at the bow. The other ends of the draw bar operate on the sides of the two sections 4 and 5. Keeper guides 31 are attached to the sides of the sections. The draw bars 28 and 29 are provided with antifriction rollers which engage the keeper guides 31. Bearing bars 32 are attached to the draw bars 28 and 29. A central roller 33 is journaled in the bar 32 and engages the face of the keeper guide 31 and small rollers 34 are journaled in the bars 32 and run under flanges 35 of the keeper guides 31. The sections 4 and 5 are provided with railings 15. Each draw bar 28 and 29 is operated by a block and tackle 36 and a capstan 37. In order to resist the back pressure of the draw bars 28 and 29, shoulders 38 are attached to and made rigid with the bars 28 and 29 and these shoulders meet and press against each other while the bars 28 and 29 are being operated by the capstans 37 through the block and tackle 36. The bars 28 and 29 are necessary to start the life boat sections 25 and 26 to closing. Fig. 4 shows the sections partly closed. The shoulders 38 will continue to press against each other until the hinge 30 strikes the hinge 27. Before this takes place the propellers begin to work and the boat sections are then closed by the propellers because the propellers operate much faster than the capstans and the capstans are not needed after the propellers commence to work. The draw bars 28 and 29 and the shoulders are caused to move in a horizontal plane by brackets 39 which project horizontally from the deck of the life boat. The boat sections 4 and 5 are opened for mounting on the main ship by the rudders and the propellers as hereinafter described. The keels 40 of the boat sections come together at the bottoms of the boats and the frame work 41 for supporting the rudders are attached to the keels. The flat sides of the sections 4 and 5 are closed and water tight and when the two sections are brought together to form a boat the flat surfaces simply press against each other.

Means are provided for hanging the life boat sections on the main ship. Each section 4 and 5 is provided with five hooks 42 which are rigidly attached to the life boat sections. Lugs 43 are rigidly attached to the deck of the main ship, the lugs being attached rigidly to a plate 45 which is attached to the deck of the main ship. The hooks 44 engage the hooks 42. The hooks 42 are locked to the hooks 44 by hooks 46 which are pivotally mounted on the shanks of the hooks 44 and engage the upper ends of hooks 42 and hooks 47 are pivotally mounted on hooks 46 and engage spurs or hooks on the backs of hooks 42. Levers 48 are pivotally connected to a beam or column of the ship or main ship and serve as dogs to hold the locking hooks 46 down on the hooks 42. Yokes 49 are pivotally connected to the column of the main ship and are provided with rollers 65 which drop over the upper ends of the shanks of hooks 44. Dogs 50 are pivotally connected to the column of the ship and rest normally on the yokes 49 and hold the same down to lock the hooks 44 in locked in engagement with hooks 42. This series of hooks and dogs securely attach the life boat sections to the main ship. To release the life boat sections from the main ship, turn the dogs 50 over. This will release the yokes 49. Then take the hooks 47 from the backs of hooks 42 and lift upwardly. The hooks 47 will form levers with the hooks 46 by engaging the tips of the hooks 46 for pressing or raising the yokes or levers 48. The levers 48 will raise the yokes out of engagement with the shanks of the hooks 44. This will release the hooks 44 so that the hooks 42 will slide off the hooks 44. The life boats are further anchored to the main ship by stay rods 51 which are secured to the frame work of the main ship at their upper ends. Three of such rods may be used on each section of the life boat. These stay rods are connected to the life boats by lever hooks 52 which are pivotally connected to the stay rods 51 and have hooks 53 at the lower ends which engage eyes 54 on the decks of the life boat sections. The levers 52 have a number of key seats and may be locked down by keys 55.

The life boat sections are elevated and let

down to and from the main ship by certain hooks and rods and hoisting machinery shown in my co-pending application for hoisting and launching machinery for life boats.

The stern posts of the life boat sections are locked together by the devices shown in Figs. 12 to 15 inclusive. A post 56 for one section has hooks 57 pivoted thereon. A post 58 for the other life boat section has hooks 59 formed therein and rigid therewith to be engaged by the hooks 57 of the other section. The posts 56 and 58 may be formed of sheet metal or slabs of metal which are bolted together. A plate 60 is operatively connected to the post 58 and is moved vertically by the hooks 57 being pressed through the post 58 and as soon as the hooks are pressed through the post 58, the plate 60 drops down behind the tips of the hooks 57 and locks them in place automatically. Fig. 15 shows the posts locked together in operative relation. In Figs. 12 and 13 the face plates 61 (shown in Fig. 15) are removed to expose the hooks 57 and 59. The locking plate 60 can be raised to release the hooks 57 by a hand lever 62. A plate 63 (similar to plate 60) may be used to press on the back ends of hooks 57 to hold the front ends of the hooks up out of the way while the life boat section is being adjusted. A hand lever 64 is pivotally connected to the plate 63 for raising this plate.

The hooks 42 of the hanging mechanism for the inside of the life boat, that is, the side of the life boat next to the main ship is provided with guides 66 to make the hooks 42 and 44 center on each other. The arms 48 used in this mechanism are provided with an antifriction roller 67.

The capstans 37 are provided with a pedestal 68 having a base flange 69 and antifriction rollers 70 are provided with shafts journaled in the base flange 69. A deck and bearing plate 71 is attached to the deck of the life boat. A pivot hole is made therein for the spindle 72 which is integral with the pedestal 68. A base cap 73 incloses the rollers 70 and engages a portion of the flange 69 and is attached to the deck of the life boat. A wheel 74 is bolted to a flange 75 of the pedestal 68. The handles 76 are secured to the wheel 74 by straps 77 and rivets. The capstan is turned by the handles which are removable. The cap 73 is made in two parts and the parts are secured together by lugs 79 and bolts 80 and both parts are secured to the deck of the boat by bolts 81. A ratchet 82 is formed on the base flange 69 of the pedestal and dogs 83 are pivotally mounted on the lower part of the cap 73 and the dogs 83 are held in engagement with the ratchet 82 by means of springs 84. The dogs 83 may be locked out of engagement with the ratchet 82 by means of pins 85 which may be inserted in the cap 73.

The bow stem 6 is composed of a hinge pin 86 and hinges 87 which have arms 88 forming parts of the hull of the outside of the life boat and arms 89 which form parts of the hull of the inside of the boat, that is, the arms 89 form parts of the hulls of the meeting faces of the two sections which make a life boat. The pin 86 is shown as a pipe. It is apparent that this pin can be a solid rod.

What I claim is:

1. A life-boat for attachment to a main ship comprising two sections hinged together at one end and adapted to fold together to form a single boat, each section being provided with a propeller and an engine for driving the propeller, and means for attaching each section to the main ship.

2. A life-boat attachment to a main ship comprising two sections hinged together at one end and adapted to fold together to form a single boat, means for starting the folding of the two sections together comprising draw-bars hingedly connected together and guides therefor operatively connected to each section and means for automatically continuing the folding of the sections together.

3. A life-boat for attachment to a main ship comprising two sections hinged together at one end and adapted to fold together to form a single boat, means for starting the folding of the sections together, propellers for automatically continuing the folding of the sections together, and means for automatically locking the sections together.

4. A life-boat for attachment to a main ship comprising two sections hinged together at one end and adapted to fold together to form a single boat, each section being provided with a capstan, a draw-bar, and block and tackle connecting the capstan and the draw-bar, the two draw-bars being hingedly connected together, for folding the sections together.

5. A life-boat for attachment to a main ship, comprising two sections hinged together at one end and adapted to fold together to form a single boat, each section being provided with a propeller and means for driving the propeller, and a capstan and devices operatively connecting the capstan to its section, said capstan and its connection being used to start the folding of the sections and said propellers serving to complete the folding of the sections together.

6. A life-boat for attachment to a main ship comprising two water-tight sections hinged together at one end and adapted to fold together to form a single boat, each section being provided with a series of cabins and berths and a propeller, and

means for driving the propeller, and means carried by each section for starting the folding of the two sections together, and the propellers serving to complete the folding of the sections together.

7. A life-boat for attachment to a main ship comprising two independent water-tight sections hinged together at one end and adapted to fold together to form a single boat, means for hanging each section on a main ship, and means for folding the sections together consisting of a capstan mounted on each section, and two draw-bars hingedly connected together at one end, and the other ends being operatively connected to said sections, and a block and tackle for each section operatively connecting the capstan and the draw-bar of each section.

8. A life-boat for attachment to a main ship comprising two sections, each being independent and water-tight, means for hingedly connecting each section to a bow stem, and a stern stem composed of a bar on each section, a series of hooks on each bar and a vertically movable bar for automatically locking said hooks together when the two sections are folded.

9. A life-boat for attachment to a main ship comprising two independent water-tight sections, each having a flat side adapted to fold against the main ship and the two flat sides forming the meeting faces of the two sections when folded together, a bow stem hingedly connecting the two sections together, means for folding the two sections to bring the flat sides together, a stern stem composed of a bar on each section and a series of interengaging hooks on each bar, a vertically movable bar for automatically locking said hooks when the sections are folded together.

10. A life-boat for attachment to a main ship comprising two independent sections hingedly connected together and adapted to fold together to form a single boat, and means for folding the sections together consisting of a capstan mounted on each section, two draw-bars hingedly connected together at one end, and the other ends of said draw-bars being operatively connected to said sections, a guiding member for each draw-bar attached to each section, and a block and tackle on each section operatively connecting the capstan to the coöperating draw-bar.

11. A life-boat for attachment to a main ship comprising two independent sections hingedly connected together and adapted to fold together to form a single boat, and means for folding the sections together consisting of a capstan mounted on each section, two draw-bars hingedly connected together at one end, and the other ends of said draw-bars being operatively connected to said sections, a guiding member for each draw-bar attached to each section, and a block and tackle on each section operatively connecting the capstan to the coöperating draw-bar, each draw-bar being slidably connected with its guiding member and provided with anti-friction rollers.

12. The combination of a main ship and a plurality of life-boats, each life-boat being composed of two sections hingedly connected together and adapted to form a single boat when detached from the main ship, the main ship having hooks and each life-boat section having hooks adapted to interengage the hooks on the main ship, means for locking the said hooks in engagement, and hangers for further attaching the life-boat sections to the main ship.

In testimony whereof, I set my hand in the presence of two witnesses, this 13th day of September, 1912.

B. F. SARGEANT.

Witnesses:
A. L. JACKSON,
L. T. KNIGHT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."