H. W. TRINKLE.

LIFE LINE AND LAUNCHING DEVICE THEREFOR.

APPLICATION FILED MAR. 13, 1918.

1,282,323.

Patented Oct. 22, 1918.

2 SHEETS—SHEET 1.

Fig. 2.



Fig. 8.

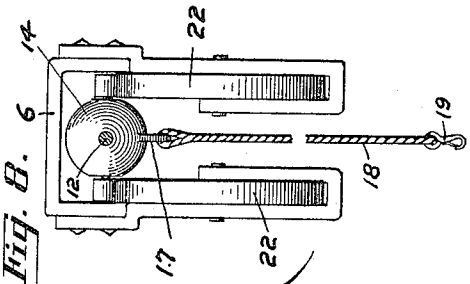
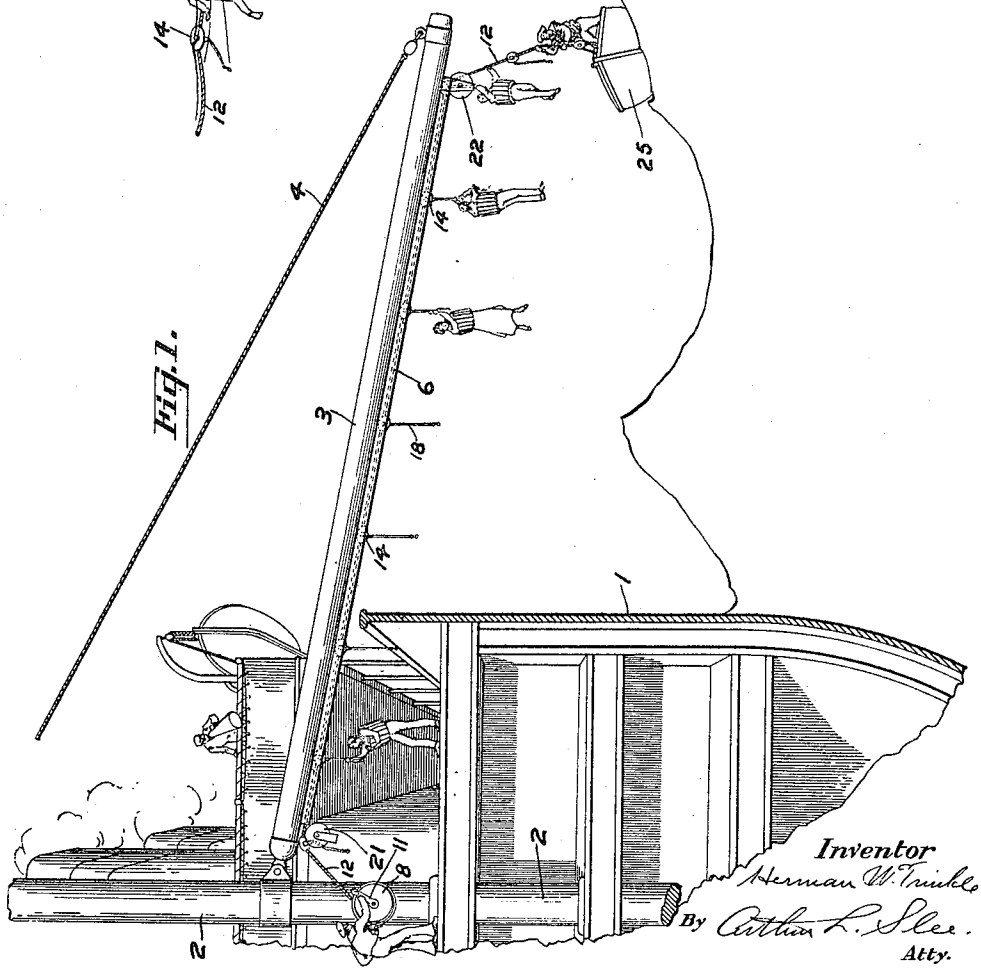


Fig. 1.



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2 SHEETS—SHEET 2.

Fig. 3.

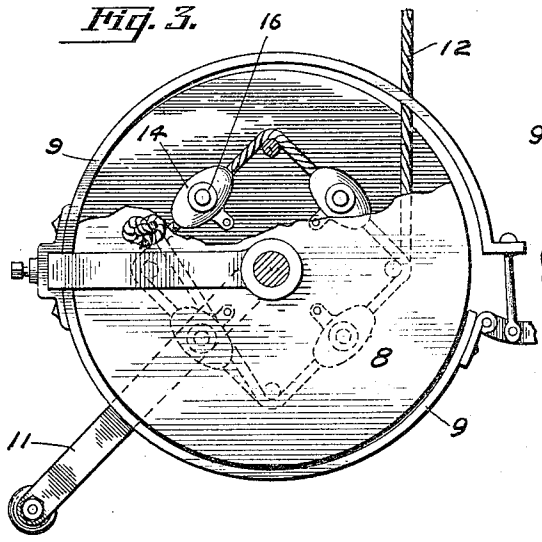


Fig. 4.

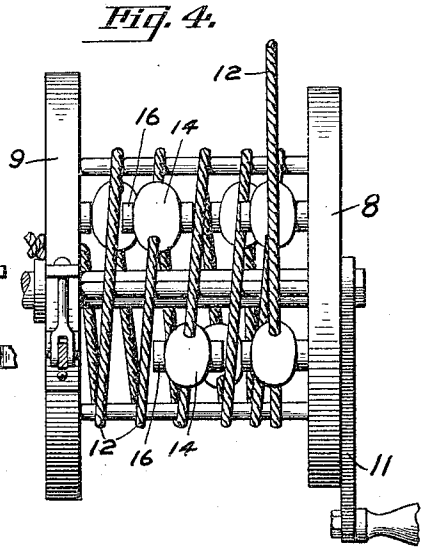


Fig. 5.

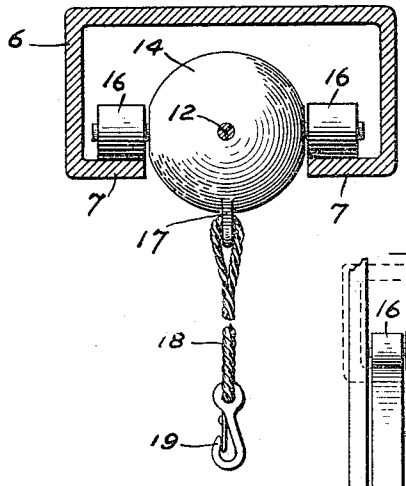


Fig. 6.

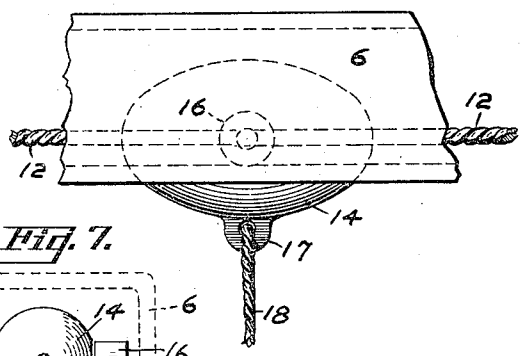
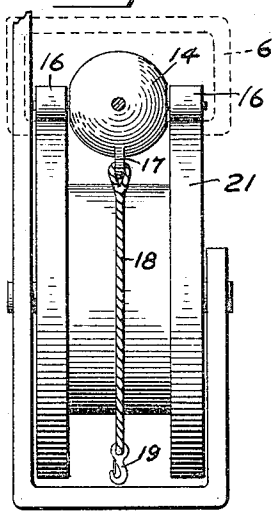


Fig. 7.



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UNITED STATES PATENT OFFICE.

HERMAN W. TRINKLE, OF SAN FRANCISCO, CALIFORNIA.

LIFE-LINE AND LAUNCHING DEVICE THEREFOR.

1,282,323. Specification of Letters Patent. Patented Oct. 22, 1918.

Application filed March 13, 1918. Serial No. 223,234.

To all whom it may concern:

Be it known that I, HERMAN W. TRINKLE, a citizen of the United States, residing in the city and county of San Francisco and State of California, have invented a new and useful Improvement in Life-Lines and Launching Devices Therefor, of which the following is a specification.

My invention relates to improvements in life lines and launching devices therefor wherein a double track operates in conjunction with a line and floats thereon to launch persons from a sinking vessel over and beyond the side of said vessel; and the objects of my invention are

First, to provide improved means for launching persons over and beyond the side of a ship either into the water direct or into a life boat held at a distance from the sides of the ship;

Second, to provide means for launching a life line that will serve to hold together persons launched into the water so that said persons may coöperate mutually;

Third, to provide improved means for controlling the launching of the line; and

Fourth, to provide a launching device of the character described from which the line may be easily and readily separated in case it becomes necessary to abandon the ship suddenly.

I accomplish these several features by means of the improved device disclosed in the drawings forming a part of the present specification wherein like characters of reference are used to designate similar parts throughout the said specification and drawings, and in which—

Figure 1 is a broken sectional view of a vessel at sea disclosing my invention in operation;

Fig. 2 is a detailed view disclosing the manner in which launched passengers or persons are held together in the water after having been launched;

Fig. 3 is an enlarged side elevation of a drum for controlling the launching of the line;

Fig. 4 is a front elevation of Fig. 3;

Fig. 5 is a transverse sectional view through the launching tracks;

Fig. 6 is a side broken elevation of Fig. 5;

Fig. 7 is an enlarged detailed view of the pulley for receiving the line from the drum and conveying same into the tracks; and

Fig. 8 is a detailed view of the pulley at the delivery end of the tracks.

Referring to the drawings the numeral 1 is used to designate in general a ship or vessel in a sinking condition from which passengers are to be launched, said vessel 1 being provided with the usual mast 2 and boom 3, said boom 3 being raised or lowered in the usual manner by means of a line 4 secured to the free end thereof.

On the under face or surface of the boom 3 I have secured a double track 6 consisting of an inverted channel having inwardly extending flanges 7.

A drum 8 is rotatably mounted upon the mast 2 and just below the inner end of the boom 3, said drum being provided with a suitable band brake 9 and a crank 11 by means of which said drum 8 may be rotated or its rotation retarded.

A life line 12, having floats 14 secured thereto at regular intervals is wound upon the drum 8 until ready for use.

Each float 14 is provided with rollers 16 on opposite sides thereof and eyelets 17 on the under side from which eyelets 17 are suspended short lines 18 each terminating in a snap hook 19 by means of which a person may be secured to said line 18 either by fastening the line 18 around the person or securing the snap hook 18 to a life preserver or belt.

A double flanged pulley 21 is rotatably mounted upon the underside of the boom 3 near the receiving end of the track 6 to engage the rollers 16 on the floats 14 and deliver said rollers 14 onto the flanges 7 of the double track or channel 6.

A pair of pulleys 22 are pivotally suspended from the boom 3 and at the delivery end of the track 6, said pulleys being arranged to lower the floats 14, by means of the rollers 16 thereon, gradually from the end of said track 6.

In operation when passengers are to be launched either into a life boat 25 at a distance from the vessel 1 or directly into the water, life preservers are assumed and the line 12 is paid over the pulley 21 at the

receiving end of the track 6 and the rollers 16 are launched directly onto the flanges 7 of the track 6 by means of said pulley.

Passengers or persons are attached to the line 12 by securing the snap hooks 19 directly to the life preservers or by passing the short lines 18 around the passengers and securing the hook 19 to the eyelet 17 of the float 14.

The passenger then passes over the rail and is launched into space by means of the short line 18 and the line 12 secured to the floats 14 within the track 6.

As the boom is inclined downwardly and away from the ship the weight of the passenger will move the floats 14 and line 12 toward the delivery end of the tracks 6. A person in charge of the life boat 25 will assist in lowering the passenger into said boat 25.

If no boat is available and the passengers are launched directly into the water the life line 12 will serve to keep the passengers together to obtain the benefit of any mutual assistance that may be available.

For instance, if several passengers who can swim are secured to a life line with others passengers who can not swim it is evident that the swimming passengers can tow the others to an adjacent shore or other landing without being subjected to the inconvenience or danger caused by the close proximity of those who can not swim.

After having been launched into the water, those passengers who may be picked up by other boats may be easily released from the line 12 by means of the snap hooks 19.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is—

1. A life line and launching device therefor comprising a line having floats attached thereto at regular intervals; and means attached to a boom of a vessel or the like to slidably engage the floats to launch said line and floats over and beyond the side of a vessel.

2. A life line and launching device therefor comprising a line having floats attached thereto at regular intervals; and means attached to a boom of a vessel or the like to slidably engage the floats to launch said line and floats over and beyond the side of a vessel; and means secured to each float to suspend a person.

3. A life line and launching device therefor comprising a line having floats attached thereto at regular intervals; and tracks attached to the underside of a boom or the like to slidably engage the floats and to launch the same over and beyond the side of a vessel.

4. A life line and launching device therefor comprising a line having floats attached thereto at regular intervals; and means attached to a boom of a vessel or the like to slidably engage the floats to launch said line and floats over and beyond the side of a vessel; and means secured to each float to suspend a person.

5. A life line and launching device therefor comprising a line having floats attached thereto at regular intervals; and means attached to a boom of a vessel or the like to slidably engage the floats to launch said line and floats over and beyond the side of a vessel; and means secured to each float to suspend a person; and means for controlling the launching of the line.

6. A life line and launching device therefor comprising a line having floats attached thereto at regular intervals; rollers arranged on each side of the floats; and tracks attached to the under side of a boom or the like to engage the rollers and thereby support and launch the floats over and beyond the side of a vessel or the like.

7. A life line and launching device therefor comprising a line having floats attached thereto at regular intervals; rollers arranged on each side of the floats; and tracks attached to the under side of a boom or the like to engage the rollers and thereby support and launch the floats over and beyond the side of a vessel or the like; and means for controlling the launching of the line.

8. A life line and launching device therefor comprising a line having floats arranged at regular intervals thereon; a short line extending from each float and having means for attaching said short line to a person; rollers arranged on opposite sides of each float; a double track attached to the underside of a boom or the like to engage the rollers and thereby support and launch the line; a drum upon which the line may be wound to deliver said line to the double tracks; and means for retarding the rotation of the drum to control the launching of the line.

9. A life line and launching device therefor comprising a line having floats attached thereto at regular intervals; a short line attached to each float and having means for securing said line to a person; rollers mounted upon opposite sides of the floats; a double track attached to the underside of a boom or the like to engage the rollers and thereby support and launch the said floats and line; a drum upon which the line may be wound; means for retarding the rotation of the drum; and means for receiving the line from the drum and paying said line and floats thereon onto the double track.

10. A life line and launching device therefor comprising a line having floats attached thereto at regular intervals; a short line at-

tached to each float and having means for securing said line to a person; rollers mounted upon opposite sides of the floats; a double track attached to the underside of a boom or the like to engage the rollers and thereby support and launch the said floats and line; a drum upon which the line may be wound; means for retarding the rotation of the drum; and a pair of pulleys arranged to engage the rollers on the floats and pay said rollers and floats onto the double track to launch said floats and line over and beyond the side of a vessel.

In witness whereof I hereunto set my signature.

HERMAN W. TRINKLE.

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