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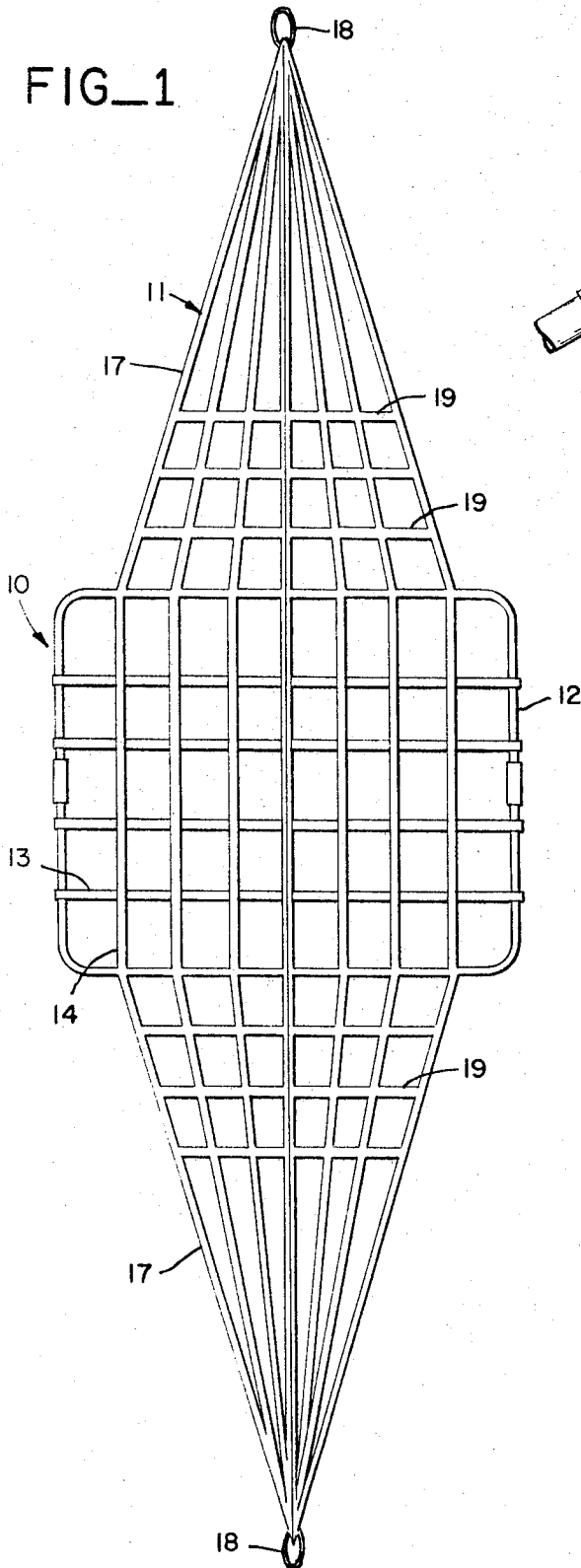
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INFLATED LIFE RAFT LAUNCHING DEVICE

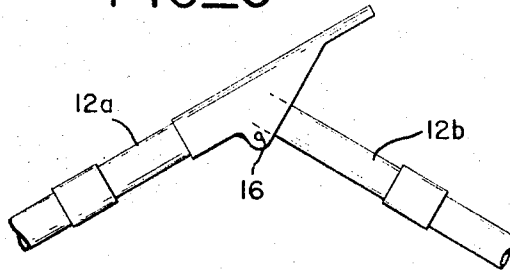
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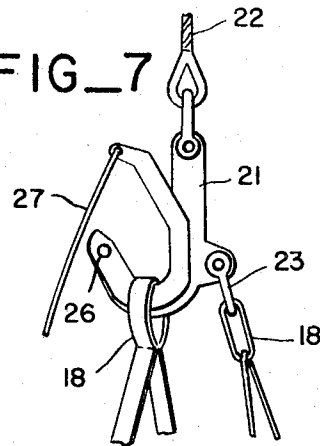
FIG_1



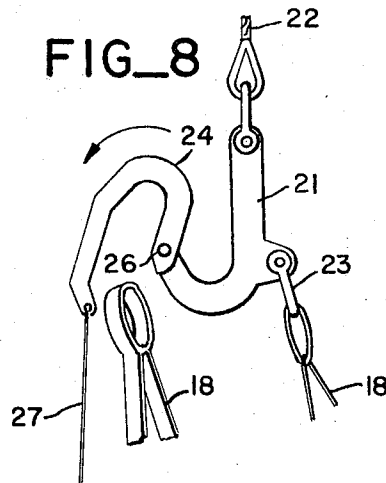
FIG_5



FIG_7



FIG_8



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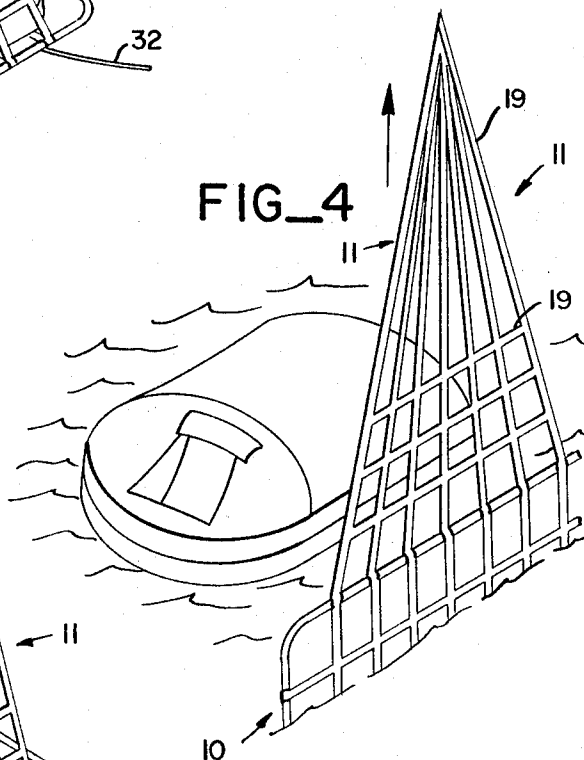
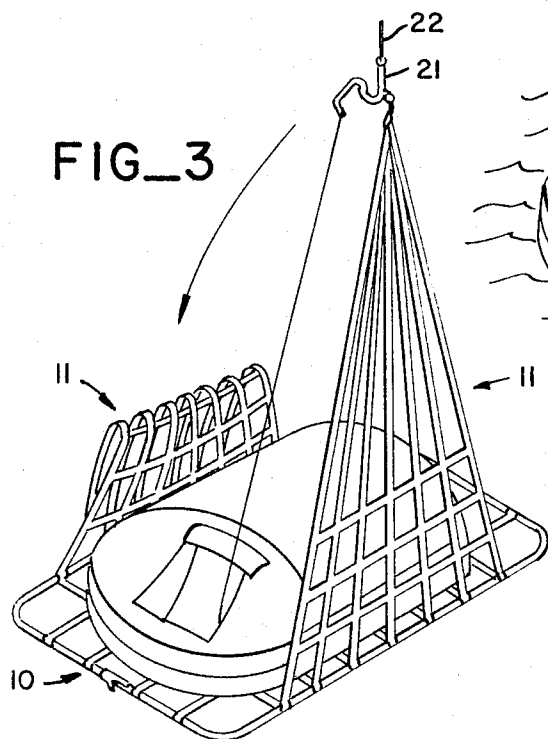
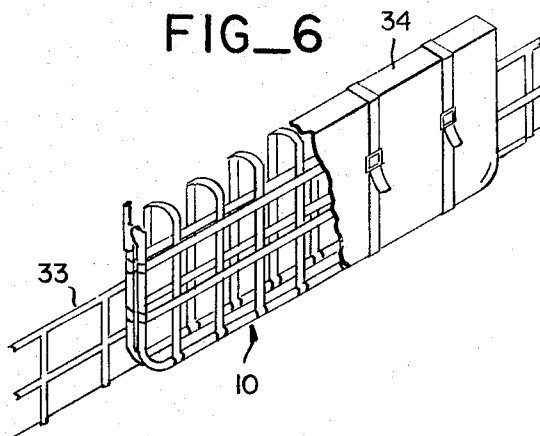
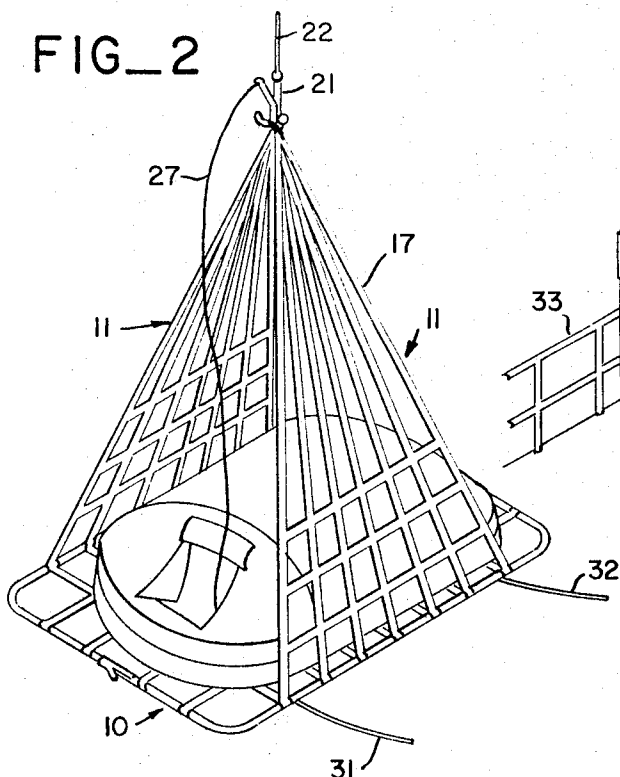
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INFLATED LIFE RAFT LAUNCHING DEVICE

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2 Sheets-Sheet 2



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INFLATED LIFE RAFT LAUNCHING DEVICE

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1 Claim. (Cl. 9—30)

ABSTRACT OF THE DISCLOSURE

Apparatus for launching inflated life rafts from the deck of a ship and for retrieving it after launching. A platform means underlies the raft and has flexible side webbing with loops for engaging a releasable davit hook. The raft is lifted intact for launching and after being deposited in the water, a release cord is pulled to drop one side webbing. The platform means and the dropped webbing sink below the raft whereby the apparatus is retrieved by lifting the other side webbing.

Specification

This invention relates generally to marine equipment for the launching of inflated life rafts.

Inflatable life rafts such as are used for marine life-saving equipment are generally packed in containers that are stored on the ship. In the event the ship sinks, the containers are released to float to the surface, and a pull cord is operated to release the inflating gas. The two sections of the container are broken apart by the gas pressure, after which the raft is fully inflated. Because such rafts are made largely of fabric reinforced synthetic rubber or elastomer, they have very little rigidity, and therefore they cannot be inflated on deck and then launched with passengers by the use of conventional life boat davits.

In general, it is an object of this invention to provide a device which makes possible the safe launching of inflated life rafts with the passengers from ship decks.

Another object of the invention is to provide a launching device of the above character which can be stored in a relatively small space when not in use.

Another object of the invention is to provide a device of the above character which can be readily retrieved after a launching operation.

Additional objects and features of the invention will appear from the following description in which the preferred embodiment has been set forth in detail in conjunction with the accompanying drawing.

Referring to the drawing:

FIGURE 1 is a plan view illustrating a device in accordance with the present invention;

FIGURE 2 is a perspective view illustrating the device being used to lift an inflated life raft from the deck of a ship;

FIGURE 3 is a perspective view illustrating how the webbing for one side of the device is released from the davit hook after the raft has been deposited upon the surface of the water;

FIGURE 4 is a perspective view immediately after the launching and illustrating the positioning of the parts just prior to retrieving the device;

FIGURE 5 is a detail illustrating the hinge connection between sections of the platform frame;

FIGURE 6 is a perspective view illustrating how the device can be completely folded and provided with a cover; and

FIGURES 7 and 8 show a trip hook in normal and tripped operating positions.

The device as shown in FIGURE 1 consists generally of a platform 10, together with connected lengths of

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webbing 11. The platform is made in such a manner that it has sufficient strength to elevate the inflated raft with passengers, while at the same time being non-buoyant and of open construction whereby it readily sinks below the raft after the raft has been launched. Thus the platform illustrated consists of a metal frame 12 having flexible elongated members 13 and 14 attached to and extending between the side and end portions of the frame, thus providing a relatively flexible supporting network.

The members 13 and 14 may be in the form of ropes, woven tapes, or in tapes formed of suitable reinforced plastic material. Preferably the end portions of the frame are provided with hinges of the type shown in FIGURE 5. Thus the end frame portions 12a and 12b are shown attached by the hinge connection 16 whereby the two sections of the frame can be folded upon each other or extended in a common plane as shown in FIGURE 1.

The lengths of webbing 11 can likewise be made of flexible members 17 that are attached to the sides of the platform frame, and which are also attached to the common lifting ring or loop 18. Additional flexible members 18 may extend crosswise of the members 17. Here again the members 17 and 18 can be made of rope, woven tape of suitable strength, or of suitable reinforced plastic materials.

All of the parts of the device are non-buoyant, or in other words, they sink when placed in the water. This applies to the platform by itself, as well each of the lengths of webbing 11.

Davit hooks of the kind used for my device are shown in FIGURES 7 and 8. The main hook 21 which is attached to the hoist line 22 is provided with a bale 23 for engaging one of the loops 18. The trip hook 24 is hinged at 26 to the main hook, and is attached to the trip line 27. Normally the trip hook occupies the position shown in FIGURE 7, and it is engaged by the other loop 18 of the launching device. When the cord 27 is pulled, the trip hook 24 moves to the position shown in FIGURE 8 to disengage it from the loop 18.

Operation of my device is as follows. The platform 10 is placed flat upon the ship deck, with the lengths of webbing 11 laying alongside of the frame, or attached to the davit hook in the manner shown in FIGURE 2. The life raft, either during or after being completely inflated, is then positioned upon the platform as shown in FIGURE 2. The passengers may now take their places upon the life raft. The raft with the passengers can then be elevated by the davit, swung over the side of the ship and lowered into the water. During this operation the device may be steadied by use of the lines 31 and 32. After the raft has come to rest upon the water, the trip cord 27 is pulled to disengage the length of webbing on one side of the device whereby this webbing falls into the water in the manner shown in FIGURE 3. Within a short interval the disengaged length of webbing sinks into the water together with the platform 10 as shown in FIGURE 4. The device can now be retrieved and elevated back to the deck of the ship without danger of entangling any part of the device with the raft.

When not in use, my device can be readily stored in a comparatively small space. Thus it may be folded in the manner shown in FIGURE 6 and positioned upon the ship rail 33. Also it can be provided with a suitable protective cover 34.

It will be evident from the foregoing that I have provided a life raft launching device having a number of desirable features. Particularly it makes possible the safe launching of inflated life rafts with passengers, thus extending the usefulness of rafts of this character. Also the device is relatively simple and compact, and can be readily stored on shipboard.

I claim:
1. In apparatus for launching inflated rafts from ship decks comprising platform means adapted to be placed on the deck whereby the raft can be placed thereon, platform means comprising a metal frame and flexible members extending between the sides and ends of the frame to form a supporting network for the rafts, the metal frame being in two sections that are hinged together whereby the frame can be folded upon itself about an axis midway between and parallel to the two sides of the platform means, flexible lengths of side webbing attached to two opposite sides of the platform, the webbing for each side having a loop in the end thereof, a davit hook of the trip type, the loop for one side webbing being secured to said hook and the loop for the other side webbing being engaged with the hook for release, a pull cord connected to the davit hook for tripping the same and extending downwardly therefrom, the platform means being suspended in horizontal position by the davit hook, the platform means and the webbing being non-buoyant

whereby when the platform means is lowered to the surface of the water and the pull cord actuated to release the loop of said other side webbing the released length of webbing drops to the water and sinks together with the platform to enable withdrawal by raising the davit hook with said one side webbing engaged with the same.

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