Feb. 24, 1953 R. R. HANSEN 2,629,115

LIFE RAFT

Filed Nov. 30, 1949 2 SHEETS—SHEET 1

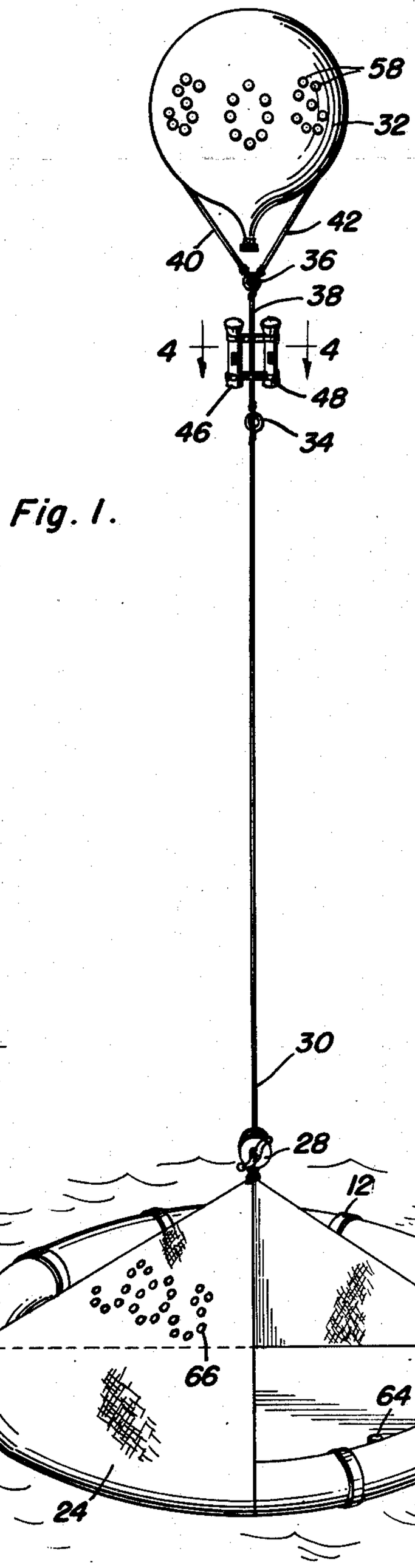

Fig. 1.

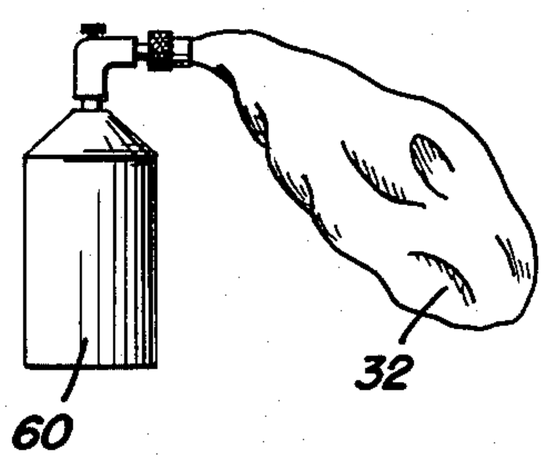

Fig. 5.

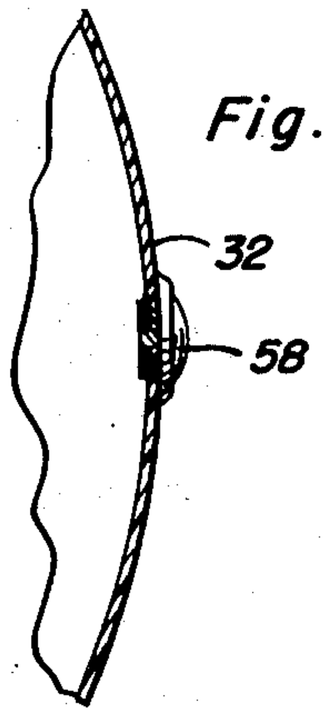

Fig. 6.

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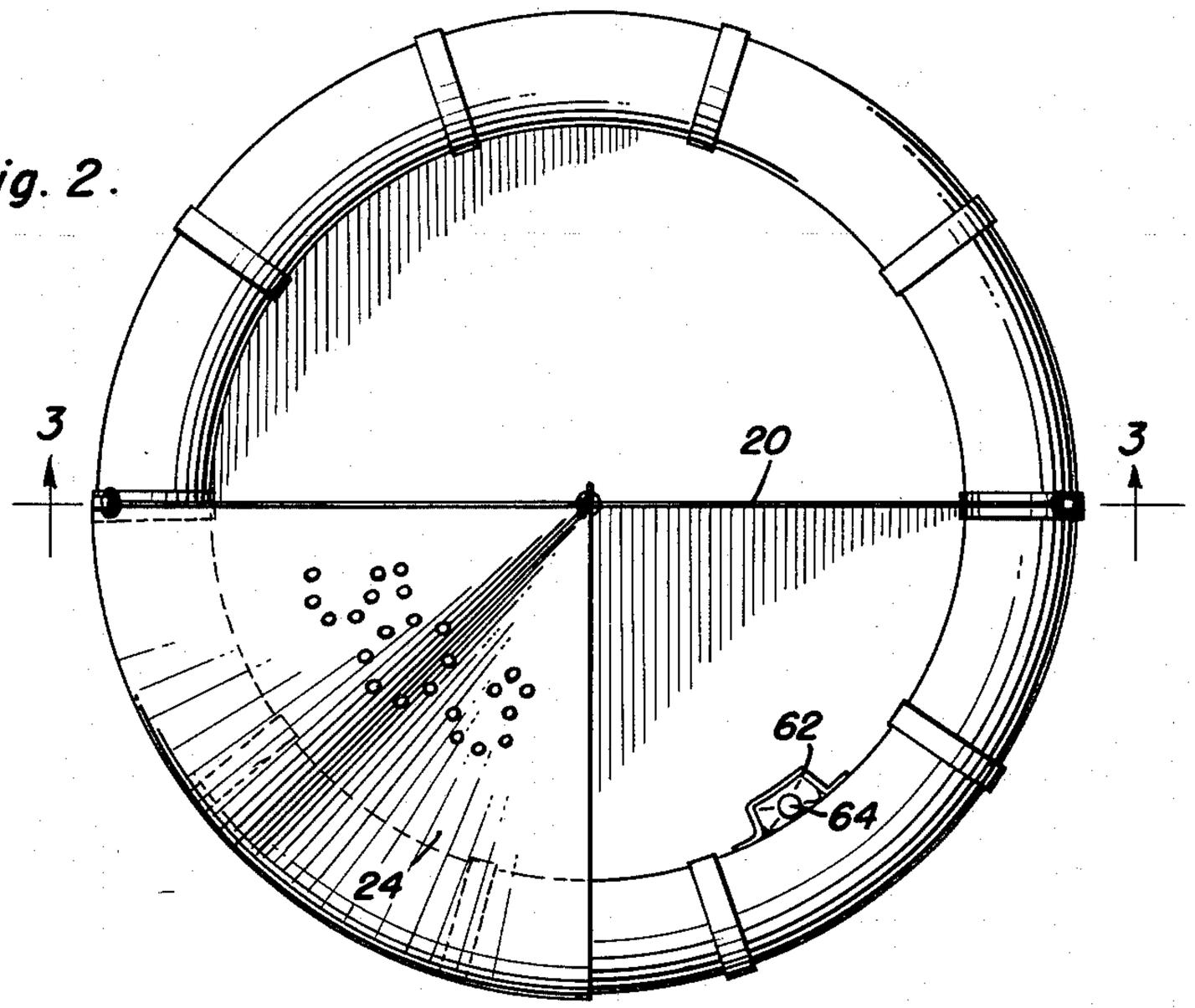
Fig. 2.



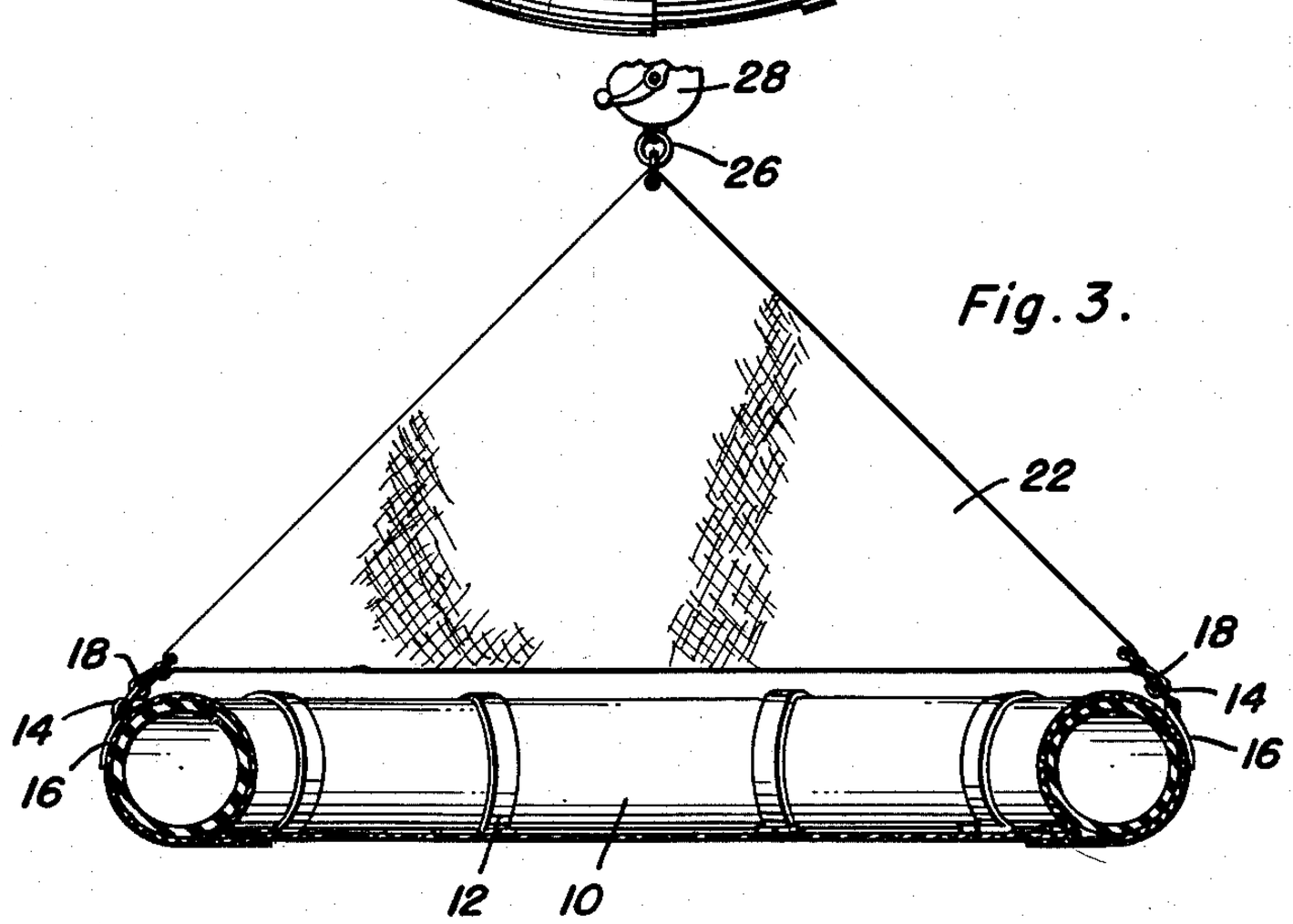
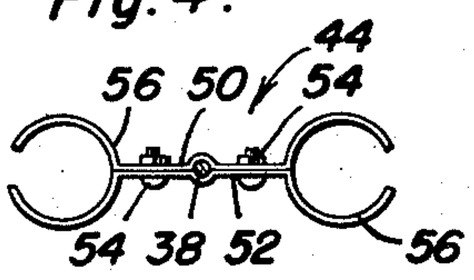


Fig. 3.

Fig. 4.



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Patented Feb. 24, 1953 2,629,115

UNITED STATES PATENT OFFICE

2,629,115

LIFE RAFT

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Application November 30, 1949, Serial No. 130,131

1 Claim. (Cl. 9—11)

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This invention relates to life saving apparatus, and more particularly to a device for aiding in the rescuing of survivors of sea disasters.

An object of this invention is to provide an easily perceivable signal for a life raft having means thereon for attracting rescuers to the life raft.

A further object of the invention is to provide a life raft having shelter means secured thereto for preventing undue sunburn or other harmful actions of the sea such as wind burn and the effect of wind thrown spray.

Yet another object of the invention is to provide means for selectively adjustably signaling for rescue by a survivor using the novel life raft.

Still further objects of the invention reside in the provision of a life saving device that is strong, sturdy, and durable, highly efficient in operation, compact, simple to use and manufacture, and relatively inexpensive.

These, together with the various ancillary objects of the invention which will become apparent as the following description proceeds, are attained by this life raft, a preferred embodiment of which has been illustrated in the accompanying drawings, by way of example only, wherein:

Figure 1 is a perspective view of the invention showing it in operative position on a body of water;

Figure 2 is a horizontal sectional view as taken along line 2—2 in Figure 1;

Figure 3 is a vertical sectional view as taken along line 3—3 in Figure 2;

Figure 4 is an enlarged plan view of the clamping means used to connect the light emitting means to the means for connecting the balloon to the raft;

Figure 5 is an elevational view showing the manner in which the balloon is filled with its gaseous content; and

Figure 6 is an enlarged sectional view of a portion of the balloon showing how the reflector devices are secured therein.

With continuing reference to the accompanying drawings wherein like reference numerals designate similar parts throughout the various views, 10 generally indicates a life raft conventionally torus in shape which is provided with the usual binding rings 12 thereon for retention if desired of life lines. The life raft 10 may be made of any conventional material such as kapok, cork, or may actually be of pneumatically inflated design having a fabric casing.

Secured to the raft 10 are diametrically opposed rings 14 which are held in place by suitable cloth flaps 16 which may be formed from

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canvas or any like material. By means of snap hooks 18, a triangular frame 20 is secured to the rings 14. The frame 20 may be constructed of rope, cloth straps or other flexible support members, and the snap hooks 18 may be secured thereto by tying, sewing, riveting or any other known connection. Stretched across the frame is a sheet of canvas 22. A second sheet of canvas 24 is secured at one edge to a side of the frame as best shown in Figures 1 and 2 and another edge is secured to the outer surface of a portion of the life raft preferably by tying to the binding rings 12. A ring 26 is used to connect the frame and a reel 28, similar to a fishing pole reel which has wound thereon line 30 to which is secured the balloon 32 through suitable ring connections 34 and 36 and lines 38, 40 and 42.

As best shown in Figures 1 and 4, a clamp generally designated by reference numeral 44 is used to connect a pair of flashlights 46 and 48 to the line 38. These clamps are formed in two sections 50 and 52 which are connected together by bolts 54 to cause the end portions 56 thereof to encompass the flashlights.

As shown in Figures 1 and 6, the balloon is provided with a plurality of reflectors 58 which are secured to the fabric of the balloon in a conventional manner. The balloon is preferably made from rubberized cloth or other latex impregnated material and is filled from a compressed gas bottle 60 which is latched to the life raft when it is in a stowed position.

A retainer bracket 62 is provided on the inner surface of the life raft for holding a canteen 64 or other suitable container for water or other drinking fluid.

When it is necessary to use the device, the balloon 32 is inflated by use of the compressed gas cylinder 60; then the flashlights are turned on so that the light emitted therefrom will shine on the reflectors 58 which are positioned in the form of any well known distress signal which is more readily perceivable from a rescue craft than the life raft without such attachment. The line 30 is then allowed to ride free on the reel 28 until the balloon is at a suitable height. The balloon will thus raise the shelter means formed by the canvas sheets 22 and 24 so as to enable a survivor to be sheltered between the sheets. It is contemplated that suitable reflectors 66 be secured to the sheet 24 to indicate a distress signal. The reflectors 66 are preferably of similar construction to the reflectors 58.

Since from the foregoing, the construction and advantages of this life raft are readily apparent,

further description is believed to be unnecessary.

However, since numerous modifications will readily occur to those skilled in the art after a consideration of the foregoing specification and accompanying drawings, it is not intended to limit the invention to the precise embodiment of life saving devices shown and described, but all suitable modifications and improvements may be resorted to which fall within the scope of the appended claim.

Having thus described the invention, what is claimed as new is:

A life saving device comprising a float, a triangular frame, two corners of said frame being secured to said float, said corners being secured at opposed sides of said float, a sheet mounted on said frame, a second sheet, one edge of said second sheet being secured to one side of said frame, another edge of said second sheet being secured to the edge of said float, a balloon attached to the remaining corner of said frame, said balloon maintaining said frame upright, said sheets providing a shelter therebetween, a line secured between said frame and said balloon, a reel controlling the effective length of said line, signal means mounted on said balloon, and signal illuminating means mounted on said line.

ROY R. HANSEN.

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