

May 8, 1923.

1,454,220

J. C. HALL

COVER RELEASING DEVICE

Filed Aug. 29, 1921

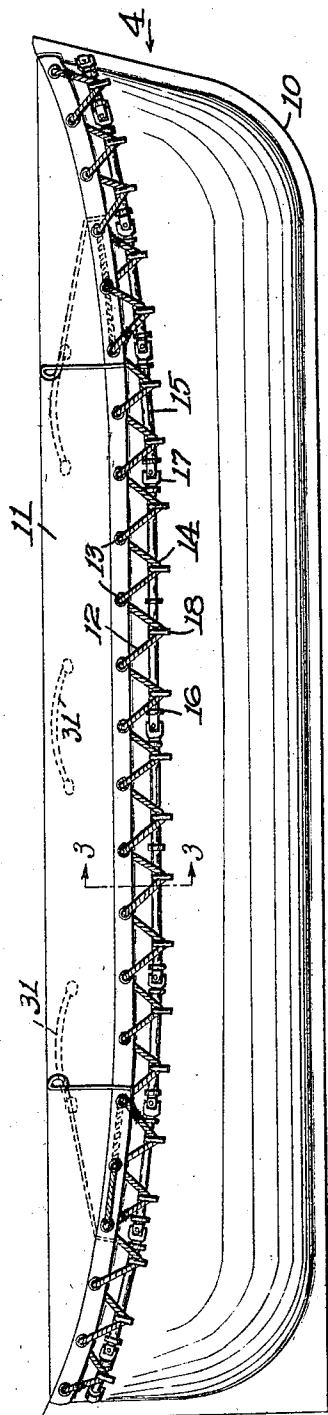


Fig. 1.

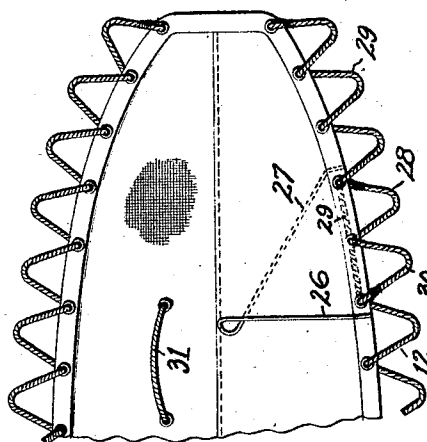
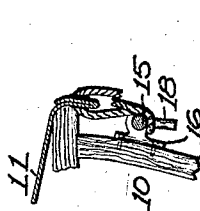


Fig. 6.



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UNITED STATES PATENT OFFICE.

JAMES C. HALL, OF WORCESTER, MASSACHUSETTS.

COVER-RELEASING DEVICE.

Application filed August 29, 1921. Serial No. 496,411.

To all whom it may concern:

Be it known that I, JAMES C. HALL, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Cover-Releasing Device, of which the following is a specification.

This invention relates to a cover releasing device particularly designed for use in connection with life boats.

Many improvements have been made in the mechanism by which life boats are lowered and launched in case of wreck or collision and these operations may now be performed with exceeding promptness, but the usual method of securing the canvas covers over the boats prevents their easy release and causes considerable delay. It has been customary to secure the covers in place by lashings which must be cut in order to release the cover. This necessitates the production of a knife or other cutting tool which is not always readily at hand and the operation is one which in darkness or in the confusion of a wreck often occasions serious loss of time when time is of the greatest value.

It is the object of my invention to provide a quick-acting releasing mechanism for boat covers, by the use of which the cover may be released with the least possible delay.

A further object is to provide a form of cover which may be easily removed from the boat after it is released, without obstruction by the fall ropes.

My invention also relates to the provision of an operating device for the releasing mechanism, so designed that it will securely hold the parts in position, but is always ready for immediate use in releasing the same.

My invention further relates to arrangements and combinations of parts which will be hereinafter described and more particularly pointed out in the appended claims.

A preferred form of my invention is shown in the drawings in which—

Fig. 1 is a side elevation of a boat provided with my improved releasing mechanism;

Fig. 2 is a detail sectional elevation taken along the line 2—2 in Fig. 4;

Fig. 3 is a detail sectional elevation taken along the line 3—3 in Fig. 1;

Fig. 4 is a partial end view of the boat; Fig. 5 is a view similar to Fig. 3 but showing the cover released;

Fig. 6 is a partial plan view of the boat cover, and

Fig. 7 is a detail sectional plan view taken along the line 7—7 in Fig. 4.

Referring to the drawings, I have shown a boat 10 having a cover 11 of canvas or other suitable material applied thereto. A rope 12 is passed through openings or grommets 13 in the edge of the cover and forms a series of loops 14 which hang downward over the side of the boat. A flexible shaft 15 is mounted in bearings 16 distributed along each side of the boat near its upper edge and preferably just below a molding thereon. The flexible shaft 15 may be of any well known construction and is shown herein as made in short lengths connected by universal joints 17. The shaft 15 is provided with a plurality of laterally projecting pins 18 spaced throughout its length, one pin being provided for each of the loops 14 of the rope 12.

When each loop is placed over its associated pin and the shaft is turned to the position shown in Fig. 3, the boat cover is firmly secured in position. If the shaft is thereafter turned to the position shown in Fig. 5, all of the loops 14 are simultaneously released and the cover may be immediately removed from the boat.

In Figs. 2 and 4 I have shown a simple actuating device by which the shafts 15 on the two sides of the boat may be simultaneously rotated to release the boat cover. For this purpose the two shafts 15 are connected by a short shaft 20 extending through the end frame of the boat at the extreme end thereof. This shaft may have a portion square in section, as indicated in Fig. 2, and is provided with a collar 21 fixed thereon and having ears 22 between which is pivoted an operating handle 23. The handle 23 is normally held in its down turned position by a recessed stop 24 and spring 25 (Fig. 7). The stop 24 effectually resists the strain of the cover upon the shafts 15 but the handle is readily released therefrom by swinging the same outward about its pivotal connection with the collar 21.

After a boat cover is released, it is necessary to remove the cover from the boat. As

the fall ropes by which the boat is suspended extend through the cover, the removal of the cover commonly requires the cutting of additional lacings before each removal
5 can be accomplished.

To avoid this operation, I have devised a special construction of boat cover which is shown in Figs. 1 and 6. Near each end of the boat cover and on the out-board side
10 thereof, I form a lateral opening in the cover between overlapping portions 26 and 27 thereof, the part 27 being shown in dotted lines in Fig. 6. I extend the side rope 12 to form a loop 28 near the end of the cover portion 27 and I provide a separate rope 29
15 for the end portion of the cover, extending the same to form a loop 30 near the end of the portion 26. There is thus no rope extending between the cover portions 26 and 27
20 and these portions are free to separate and pass on either side of the fall ropes as the cover is drawn in-board from the boat. Rope loops or bights 31 are preferably provided on the in-board side, by which the
25 cover may be easily grasped and removed.

I have thus provided a secure fastening for a boat cover which may be instantly released by a simple upward movement of the handle 23 and I have so constructed the
30 cover that it may be immediately removed from the boat after release. By the use of these improvements, the boat may be made ready for use with the least possible delay.

Having thus described my invention it
35 will be evident that changes and modifications can be made therein by those skilled in the art within the spirit and scope of my invention as set forth in the claims and I do not wish to be otherwise limited to the details herein disclosed but what I claim is:—

1. A boat cover releasing device comprising a rotatable member extending longitudinally of the boat along an edge of said cover and mounted in bearings, means to attach
45 cover thereto at a plurality of points, and means to move said member angularly in one direction to tighten said attached cover and in the opposite direction to release said attaching means from said member.

2. A boat cover releasing device comprising a rotatable member mounted in bearings disposed in spaced relation along a side edge of the boat and having spaced laterally projecting fastening devices thereon, means to
55 attach a cover to said fastening devices, and means to move said member angularly in one direction to tighten said attached cover

and in the opposite direction to release said attaching means from said fastening devices.

3. A boat cover releasing device comprising a shaft mounted in bearings disposed along a side edge of said boat and having spaced laterally projecting pins therein, a cover having loops for attachment to said pins, and means to turn said shaft to move
60 said pins to and from loop-holding position.

4. A boat cover releasing device comprising a rotatable shaft mounted in bearings disposed along a side edge of said boat and having spaced lateral projections thereon, means for attaching a cover to said projections, a manually operated device for moving said shaft angularly in one direction to tighten said attached cover and in the opposite
70 direction to release said attaching means from said projections, and means to hold said shaft from accidental angular displacement on said boat.

5. A boat cover releasing device comprising a flexible shaft extending longitudinally alongside the boat and having spaced lateral projections, means to attach a boat cover to said projections, means to turn said shaft to and from holding position, and means to retain said shaft in holding position.
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6. A cover releasing device comprising a flexible shaft made from relatively short lengths of shaft connected by universal joints, said shaft having spaced fastening devices thereon, means to attach a cover to said fastening devices, and manual means to turn said shaft to release said cover.
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7. A boat cover releasing device comprising a pair of flexible shafts extending along each side of the boat near the upper edge thereof, means to secure a cover to said shafts at a plurality of points and means to turn said shafts simultaneously to release said cover.
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8. A boat cover releasing device comprising a pair of flexible shafts extending along each side of the boat near the upper edge thereof, a connecting member between said shafts, means to attach a cover to said shafts, and an arm to turn said connecting member, movement of said arm in one direction causing simultaneous movement of said shafts to tighten said attaching means and movement of said arm in the opposite direction causing said cover to be released.
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In testimony whereof I have hereunto affixed my signature.

JAMES C. HALL.