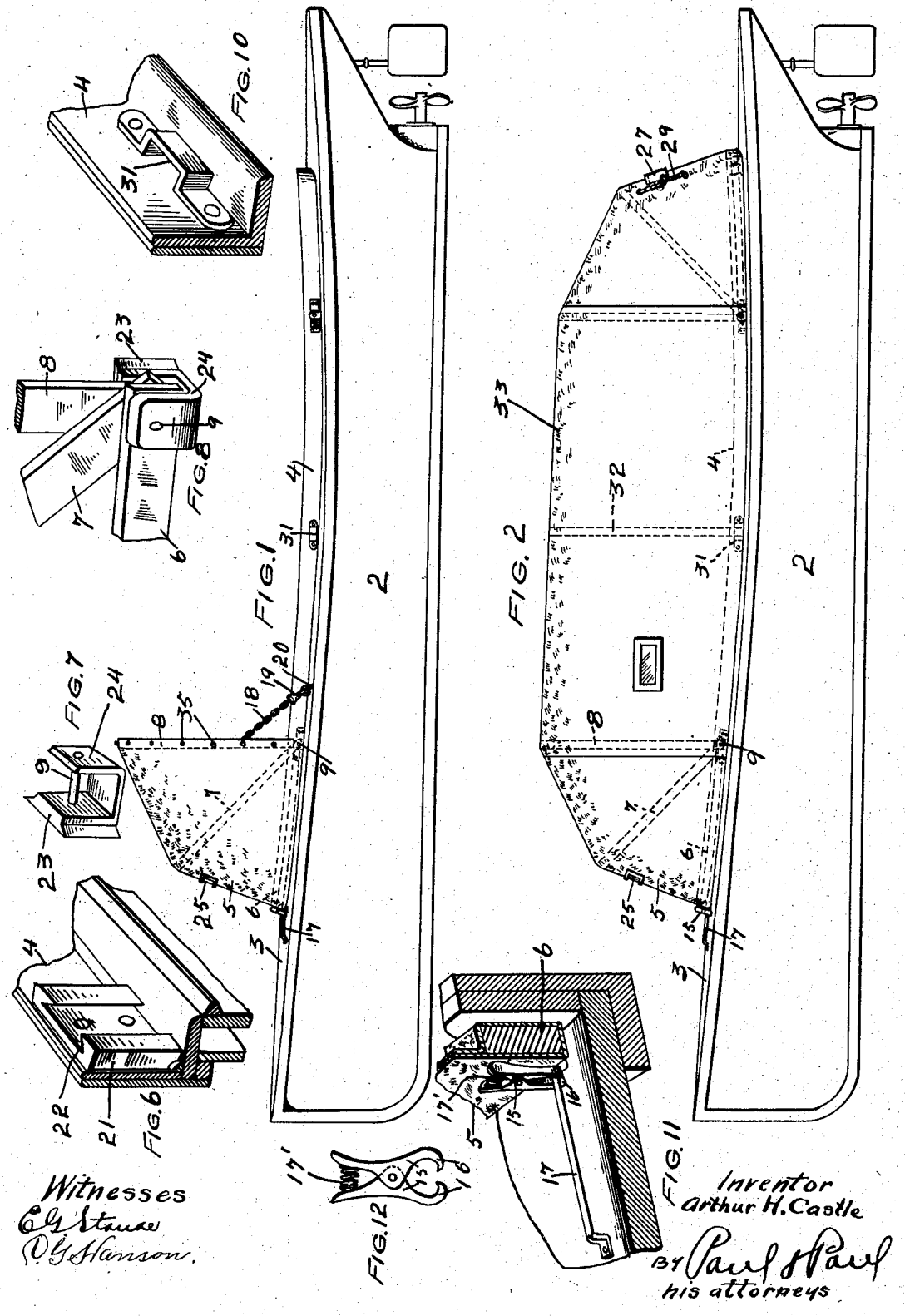
No. 739,389. PATENTED SEPT. 22, 1903.

A. H. CASTLE.

STORM HOOD AND COVER FOR LAUNCHES.

APPLICATION FILED JAN. 23, 1903.

NO MODEL. 2 SHEETS—SHEET 1.




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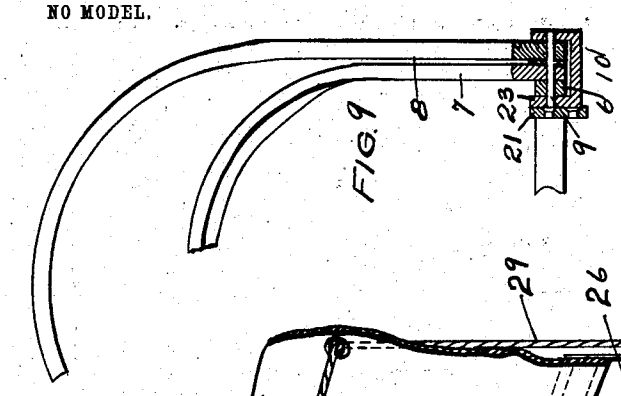



FIG. 9

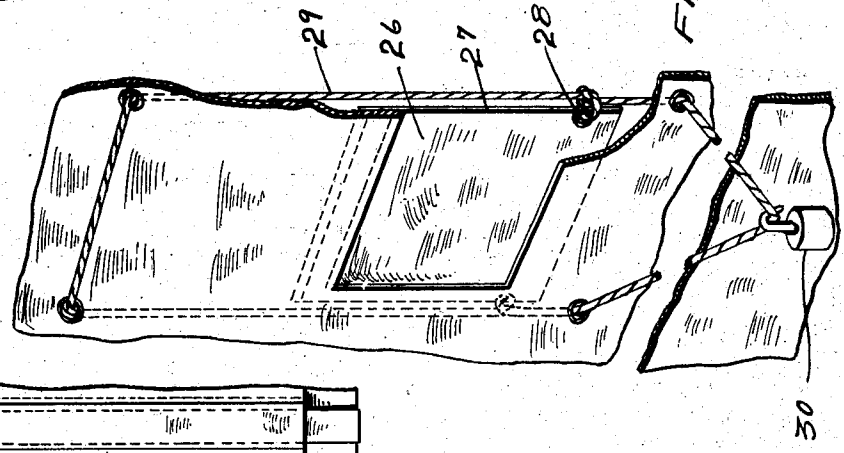
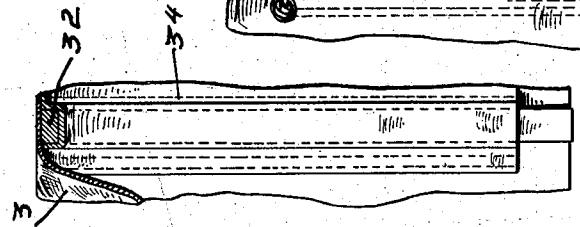



FIG. 13



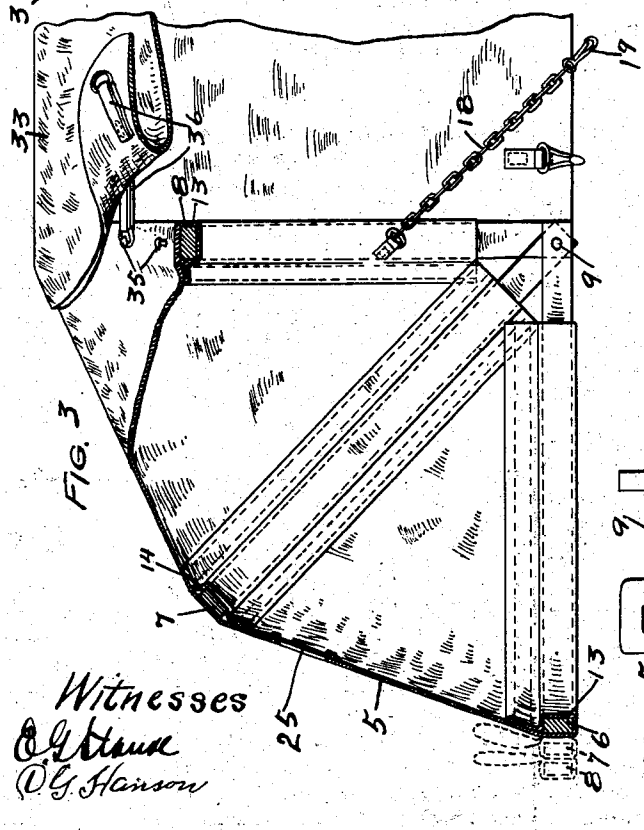




FIG. 3

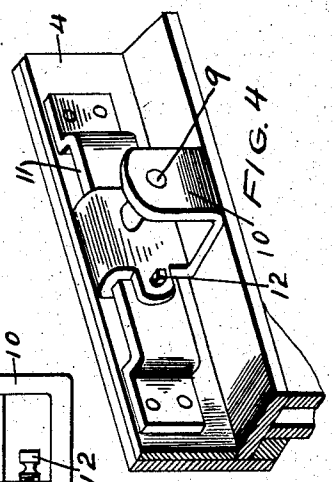



FIG. 4

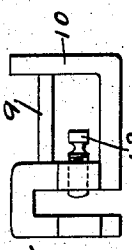



FIG. 5

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No. 739,389. Patented September 22, 1903.

# UNITED STATES PATENT OFFICE.

ARTHUR H. CASTLE, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR OF ONE-HALF TO S. M. HAUSER, OF MINNEAPOLIS, MINNESOTA.

## STORM HOOD AND COVER FOR LAUNCHES.

SPECIFICATION forming part of Letters Patent No. 739,389, dated September 22, 1903.

Application filed January 23, 1903. Serial No. 140,237. (No model.)

*To all whom it may concern:*

Be it known that I, ARTHUR H. CASTLE, of Minneapolis, county of Hennepin, State of Minnesota, have invented certain new and useful Improvements in Storm Hoods and Covers for Launches, of which the following is a specification.

In the use of a launch, particularly those of the comparatively small gasolene type, great discomfort is frequently experienced, particularly by the occupants of the forward part of the boat, while running into a cold head wind or against a heavy sea on account of there being no means for breaking the wind or preventing the spray from drenching the forward portion of the cockpit as the waves break over the bow.

The object, therefore, of my invention is to obviate this objection to the use of the small launch on a windy day by providing means for breaking the force of the wind and also protecting the forward portion of the boat and the occupants from the spray.

A further object is to provide a wind and spray shield that may also be utilized as a protection from the sun.

A further object is to provide means for protecting the occupants of the boat in stormy weather and also as a cover for the boat while at the dock.

Other objects of the invention will appear from the following detailed description.

The invention consists generally in various constructions and combinations, all as hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a side view of a launch with my improved storm-hood applied to the forward end thereof. Fig. 2 is a similar view showing the forward and rear hood with the intermediate cover. Fig. 3 is a detail view of the forward hood, showing the construction of the same and a portion of the middle cover and the manner of attaching it to the forward hood. Figs. 4 and 5 are details of the mechanism for adjustably securing the hood to the combing. Figs. 6 and 7 are details of a non-adjustable device that may be used for the same purpose. Fig. 8 illustrates the manner of securing the ribs of the hood on a common pivot. Fig. 9 is a view, partially in section, of the same. Fig. 10 is a detail of the socket wherein the rib of the middle cover is supported. Figs. 11 and 12 are details of the device for adjustably securing one of the hood-ribs to the deck, the former being a fore-and-aft section. Fig. 13 is a detail of a ventilating flap or cover and the means for operating the same provided, preferably, in the rear hood.

In the drawings, 2 represents a launch of ordinary construction and of the smaller type.

3 represents the deck; 4, the combing inclosing the cockpit and projecting, as usual, several inches above the top of the deck. The steering-wheel of these launches is usually located in the bow, and to protect the person steering and other occupants of the boat that may be in the forward portion of the cockpit I provide a storm-hood consisting, preferably, of canvas, khaki cloth, or other suitable material 5 of suitable weight and provided with a series of ribs 6, 7, and 8, or more, if found preferable, that are bow-shaped and have their ends secured on common pivots 9 in brackets 10, that are adjustably mounted on straps 11, secured to the combing on each side of the boat, said brackets being held against accidental movement by any suitable means, such as set-screws 12. Any looseness or slack in the hood-cover may be easily and quickly taken up by means of these adjustable brackets.

The ribs or bows may be secured to the cover 5 in any suitable way; but I prefer to provide folds 13 in the canvas at the top and bottom to receive the bows 6 and 8, and midway between the said folds I prefer to stitch the edges of a band 14 to the cover on the inside, the middle of the band, with the cover, forming a pocket to receive the bow 7. The bows will thus be concealed and both sides of the hood will present a neat finished appearance. The bow 6 is bent to fit around the combing at the forward end of the cockpit and lie upon the deck when the hood is not used, while the bow 8 will occupy a substantially vertical position and the bow 7 a position intermediate to the others, as shown in Fig. 3.

To hold the bow 6 in place on the deck, I

provide hooks 15, pivoted at points intermediate to their ends on the bow 6 and having jaws 16, that are adapted to engage a strap 17, secured to the deck, and to lap by each other a sufficient distance to hold the bow securely while the hood is in use.

To prevent any accidental separation of the jaws, I prefer to provide a spring 17 between the opposite ends of the hooks, which normally holds the jaws together, but permits them to be separated to disengage the bow from the strap.

Any suitable means may be provided for holding the bow 8 in a vertical position when the hood is used without the middle cover; but I prefer to provide light chains 18, secured at one end to the bow and having snap-hooks 19 to engage rings 20 in the deck. By means of these chains the hood-cover may be drawn taut when the hood is opened and the device held securely, even though the launch is running into a strong head wind. When not in use, the chains are unhooked and the bows 7 and 8 allowed to drop down on the deck outside the bow 6, as shown in Fig. 3, the difference in length of the bows being sufficient to permit them to be folded one inside the other. The hood having been attached to the launch need not be removed therefrom, it being merely necessary when not in use to drop the bows down upon the deck, where, with the folded canvas cover, they will lie against the combing and be partially concealed and protected thereby.

In Figs. 6, 7, and 8 I have shown a slightly-modified means for fastening the bows to the combing, which consists in providing a block 21, having a dovetailed socket 22 to receive a correspondingly-shaped plate 23 on a bracket 24, wherein the ends of the bows are supported on a common pivot, as described with reference to the block shown in Figs. 4 and 5. This method of fastening the bows permits their ready and convenient attachment or removal from the combing without the adjustable feature incident to the other form of fastening.

To facilitate steering, I prefer to provide a small light of glass 25 in the lower section of the hood, which while not in any way interfering with the folding of the cover will allow the person at the helm to see clearly ahead of the boat. The hood at the rear of the boat is of substantially the same construction and secured to the combing in substantially the same way as the one described and is preferably provided with a ventilating-hole 26, covered by a flexible flap 27, that is stitched to the hood, preferably on the upper side of the hole. This flap has gromets 28 near its lower edge, wherein a cord 29 is knotted, the upper portion of the cord following the edge of the flap to a point above its stitched edge and there passing through gromets in the cover, while the lower portion of the cord passes through gromets below the free edge of the flap.

Any suitable means may be provided to hold the flap in its closed position—such as a weight 30, hung on the cord below the flap—and when it is desired to open the flap the weight may be hung on the cord above the opening, when the flap will be rolled up and the ventilating-hole exposed.

In stormy weather it is frequently desirable to have a cover over the middle of the boat in addition to the hoods at the ends. I therefore provide straps 31, secured to the combing on each side near the middle and forming sockets to receive the ends of a centrally-arranged rib 32, that supports a cover 33 of material similar to the hoods and having a pocket formed by a band 34, stitched to the cover on the inside to receive the bow and prevent the cover from slipping out of place thereon. In the longer type of launches a series of bows may be employed, the number depending upon the length of the boat. The pocket above described is not essential and may be omitted entirely, if preferred.

The bow 8 of the hoods is provided with a series of hooks 35 to engage the looped ends of straps 36, that are secured to the middle cover on the inside, and each end of the cover extends, preferably, over the hood-bow, to which it is secured and forms a fly that extends for some little distance down over the hood-cover.

The cover is secured in place at the sides by means of snap-hooks corresponding to those provided on the chain 18, engaging rings in the deck.

The bow 32 is readily removable from its socket, and by disengaging the straps 36 from the hook on the hoods and disconnecting the edges of the cover from rings in the deck it can be readily removed, folded up, and packed away.

I prefer to provide the middle cover with a peep-hole corresponding to the one in the forward hood.

Instead of using a canvas covering or tarpaulin to protect the boat while lying at the dock I may raise the hoods and set up the middle cover connecting them, and thus make the storm hoods and cover serve a double purpose—to shield the occupants of the boat from the wind, spray, and sun and the boat itself from the weather when not in use—and I have found that the hoods and cover for this purpose can be more quickly and conveniently opened up or folded than the ordinary cover employed.

I claim as my invention—

1. The combination, with a launch deck and combing, of a plurality of ribs or bows curved to conform substantially to the curve of the combing at the end of the cockpit and adapted to drop down upon the deck outside of said combing, the ends of said bows being pivotally secured, a flexible material covering and connecting said bows, means for securing one of said bows at a point intermediate to its ends in a horizontal position on

the deck, and means for supporting the other bows in a raised position and drawing said covering taut between them and said horizontal bow, substantially as described.

2. The combination, with a launch deck and combing, of a plurality of bows curved to fit around the combing and drop down upon the deck at the end of the cockpit, supports whereon the ends of said bows are pivoted, said supports being adjustable lengthwise of the boat, a flexible material connecting said bows, means for securing one of said bows at a point intermediate to its ends in a substantially horizontal position on the deck and permitting its horizontal adjustment with said supports, and means for supporting the other bows in a raised position and drawing said covering taut between them and said horizontal bow, substantially as described.

3. The combination, with a launch deck and combing, of bows curved to conform substantially to the curve of the combing at the end of the cockpit and adapted to drop down upon the deck outside said combing, straps horizontally secured on the side of said combing, brackets adjustable lengthwise on said straps and on which brackets the ends of said bows are pivoted, a flexible material connecting and covering said bows, means securing one of said bows at a point intermediate to its ends in a substantially horizontal position on the deck, and means for supporting the other bows in a raised position and drawing said covering taut between them and said horizontal bow, substantially as described.

4. A covering for launches, comprising a series of curved bows pivotally supported at their ends near the forward end of the cockpit, a second series supported in a similar manner near the rear end of the cockpit, one bow of each series resting in a substantially horizontal position on the deck and following the curve of the combing and secured at points intermediate to its ends to said deck, flexible coverings connecting the bows of each series respectively, a curved bow removably arranged near the middle of the boat, and a flexible covering extending over said middle bow and having its ends secured to said first-named coverings and arranged to draw them taut between said middle and horizontal bows, substantially as described.

5. A covering for launches, comprising a series of curved bows pivotally supported at their ends near the forward end of the cockpit, a second series supported in a similar manner near the rear end of the cockpit, one bow of each series resting in a horizontal position upon the deck and following the curve of the combing at the ends of the cockpit, flexible coverings connecting the bows respectively of each series, means securing said horizontal bows at points intermediate to their ends upon the deck and permitting their adjustment lengthwise of the boat, a curved bow removably arranged near the middle of the boat, a flexible covering extending over said middle bow and having its ends attached to said first-named coverings, and the pivoted ends of the bows at each end of the cockpit being adjustable lengthwise of the boat to take up the slack in the coverings and adapt the device for use on cockpits of different length.

6. The combination, with a launch deck and combing, of a plurality of bows curved to conform substantially to the curve of the combing at the end of the cockpit and adapted to drop down upon the deck outside of said combing, straps arranged horizontally on said combing, brackets adjustable lengthwise of said straps, pivot-pins carried by said brackets and whereon the ends of said bows are pivotally supported, a flexible covering connecting said bows, a rod provided on the deck in front of said combing and extending lengthwise of the boat, means connecting said rod and one of said bows to hold it in a horizontal position and permitting its horizontal adjustment, and means for holding the other bows in a raised position above the deck and drawing said covering taut between them and said horizontal bow, substantially as described.

In witness whereof I have hereunto set my hand this 21st day of November, 1902.

ARTHUR H. CASTLE.

In presence of—

RICHARD PAUL,

C. G. HANSON.