

May 1, 1962

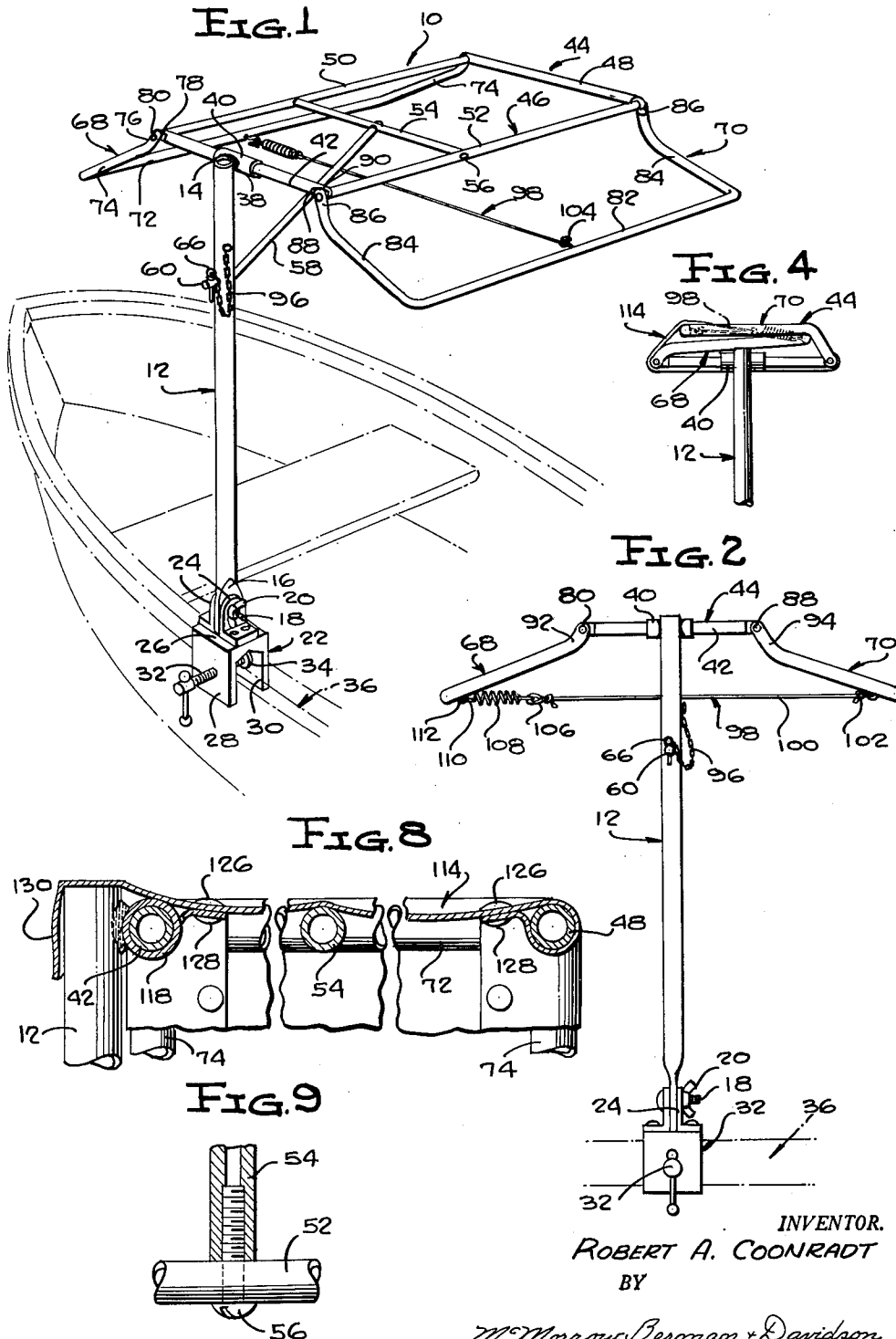
R. A. COONRADT

3,032,046

BOAT AWNING

Filed Nov. 27, 1959

2 Sheets-Sheet 1



May 1, 1962

R. A. COONRADT

3,032,046

BOAT AWNING

Filed Nov. 27, 1959

2 Sheets-Sheet 2

FIG. 3

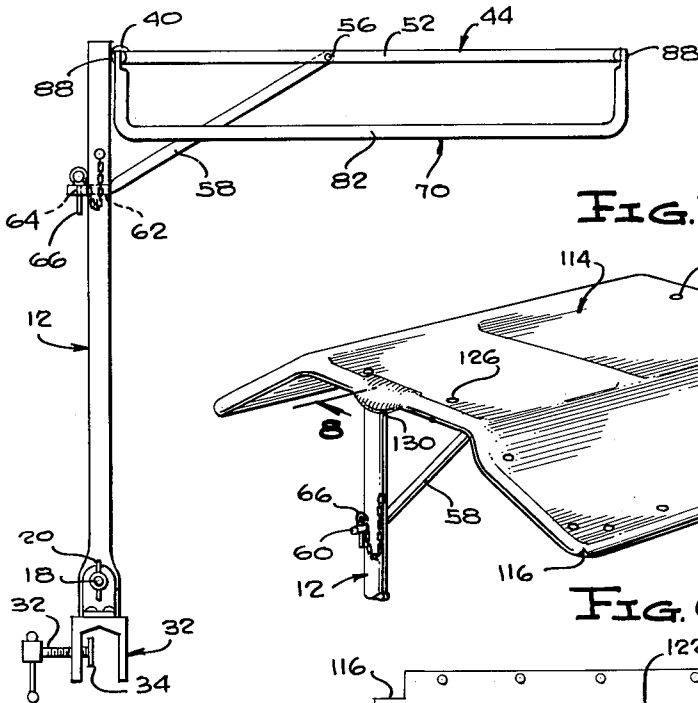


FIG. 7

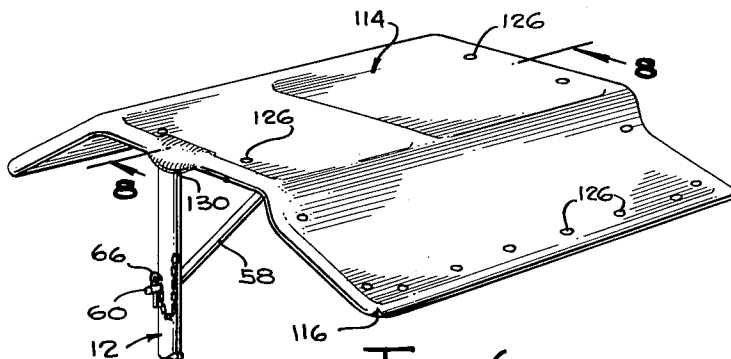


FIG. 6

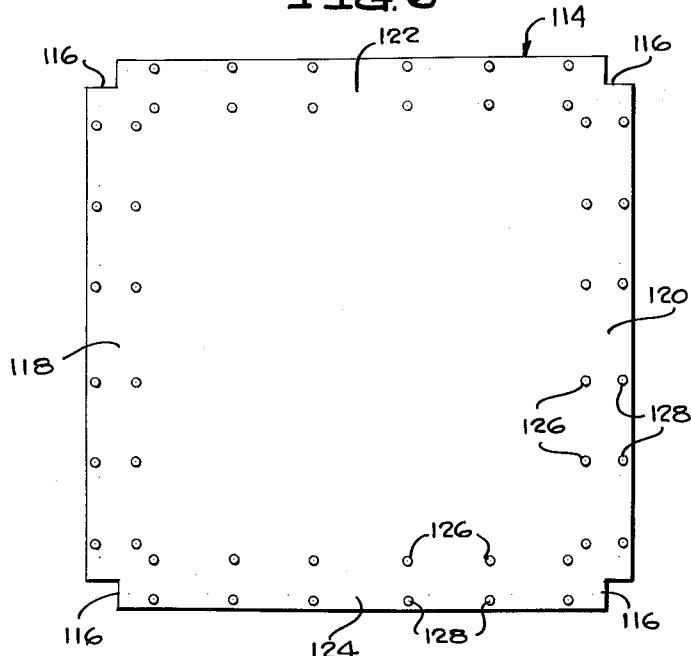
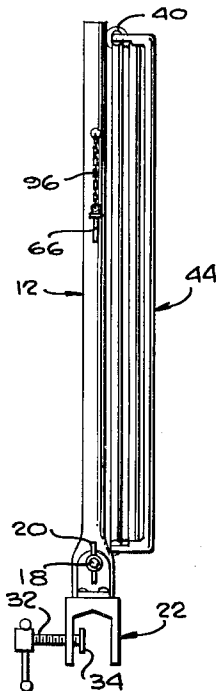


FIG. 5



INVENTOR.

ROBERT A. COONRADT

BY

McMorrow, Berman & Davidson
ATTORNEYS

1

3,032,046

BOAT AWNING

Robert A. Coonradt, 54 5th Ave., Troy, N.Y.

Filed Nov. 27, 1959, Ser. No. 855,903

2 Claims. (Cl. 135-6)

This invention relates to a novel portable and collapsible awning for use on small boats and the like.

The primary object of the invention is to provide a more practical, efficient, and serviceable device of the kind indicated which can be made of lightweight material, such as tubing, in a rigid and rugged form, and which collapses and folds to a compact bundle for easy carrying and storing, and which, when installed on a boat or the like, is easily adjustable to provide shade in different areas adjacent to its mounting.

Another object of the invention is to provide a device of the character indicated above wherein an elastic stretcher cord is provided for tightening a flexible awning panel, and for tying the awning together in collapsed and folded condition.

Other important objects and advantageous features of the invention will be apparent from the following description and the accompanying drawings, wherein, for purposes of illustration only, a specific form of the invention is set forth in detail.

In the drawings:

FIGURE 1 is a schematic perspective view showing an awning of the present invention installed on a boat, the awning panel being removed;

FIGURE 2 is an outer end elevation, taken from the left in FIGURE 1;

FIGURE 3 is a side elevation of the awning;

FIGURE 4 is a fragmentary outer end elevation thereof, showing the awning frame in collapsed condition;

FIGURE 5 is a side elevation showing the awning collapsed and folded;

FIGURE 6 is a plan view of the awning panel;

FIGURE 7 is a fragmentary perspective view showing the awning panel in place on the frame and in stretched condition;

FIGURE 8 is an enlarged, contracted, and fragmentary vertical section taken on the line 8-8 of FIGURE 7; and,

FIGURE 9 is an enlarged fragmentary top plan view, partly broken away and in section, showing the pivotal mounting of an end of the spreader bar in the awning frame.

Referring in detail to the drawings, wherein like numerals designate like parts throughout the several views, the illustrated awning, generally designated 10, comprises a vertically elongated post 12 having a terminal upper end 14 and terminating at its lower end in a flat 16, through which a clamping bolt 18 extends and has a wing nut 20.

Secured on the flat 16 by means of the bolt 18, for swinging adjustment relative thereto, is a rigid channel clamp 22, having upstanding spaced ears 24 on its bight portion 26 which engage the opposite sides of the flat 16 and are traversed by the bolt 18. The clamp 22 has depending parallel outer and inner legs 28 and 30, respectively, and a handle-equipped clamping screw 32 is threaded through the outer leg 28 and has a head 34 between the legs for engagement with the outer side of a support, such as a boat gunwale 36, in opposition to engagement of the inner leg 30 with the inner side of the gunwale. The awning 10 can equally well be mounted, instead, on the transom or other part of a boat, or upon any suitable support on land.

Suitably rigidly fixed, as indicated at 38 on the inward side of the post 12 at the upper end 14 thereof is a horizontal open ended sleeve 40 in which is journaled

2

the outer cross member 42 of a collapsible and foldable awning frame 44. The awning frame 44 comprises a rigid open rectangle 46 which includes the outer cross member 42, a similar inner cross member 48, and similar parallel spaced side members 50 and 52, which extend between and are suitably fixed, at related ends, to the ends of the cross members. A spreader bar 54 extends between the side members 50 and 52 and is pivotally secured thereto at their mid-length points, as by means of screws 56 extending through the side members and threaded into related ends of the spreader bar 54, as shown in FIGURE 9. Suitably fixed to the bar 54, at the middle thereof, is the upper end of a normally diagonal prop bar 58, having on its lower end a horizontal terminal 60 to be engaged through a hole 62 provided therefor in the upper part of the post 12 at a location below its upper end 14. The terminal 60 is provided with a hole 64 through which a retaining pin 66 is engageable, at the outer side of the post 12, for holding and retaining the prop bar 58 in its diagonal frame supporting position, wherein the frame 44 is at right angles to the post 12.

Mounted on opposite sides of the frame 44 are first and second foldable sections 68 and 70, respectively, which are of generally similar U-shaped forms. The first section 68 has a straight bight portion 72 on whose ends are fixed lateral and parallel arms 74 having flats 76 on their ends which bear against flats 78 on the outer sides of the cross members 42 and 48, and are pivoted thereto, as by rivets 80, which are aligned with the axis of the side member 50. The foldable section 70 has a straight bight portion 82 and parallel arms 84 thereon which have flats 86 on their ends which bear against flats 88 on the outer side of the cross members to which they are pivoted, as indicated at 90, on the axis of the side member 52. The inward ends of the arms of the first section 68 are upwardly angled, as indicated at 92, to enable the first section 68 to be folded flat onto the rectangle 46, and the inward ends of the arms of the second section 70 are further offset, as indicated at 94, to enable the second section 70 to be folded flat upon the first section 68, in order to obtain the collapsed condition shown in FIGURE 4, preliminary to obtaining the final collapsed and folded condition shown in FIGURE 5.

The final condition is obtained by removing the pin 66 from the hole 64 in the terminal 60, removing the prop bar terminal 60 from the hole 62 in the post 12, and swinging the collapsed frame 44 down toward and against the post, as shown in FIGURE 5. The retaining pin 66 is held against loss by a chain 96 secured to the post 12.

An elastic stretcher cord 98 is provided to extend between the bight portions of the foldable sections 68 and 70, at the midpoints thereof, which comprises a flexible strand 100 looped at one end, as indicated at 102, on a hook 104 on the bight portion of the section 70, and secured at its other end, as indicated at 106, to the adjacent end of a contractile helical spring 108, having a hook 110 on its other end removably engaged with a hook 112 on the bight portion of the first section 68. When removed from the hooks 104 and 110, the cord 98 can be wrapped around the bundle formed by the awning in its folded and collapsed condition and tied, to preclude unfolding of the same.

The primary function of the stretcher cord 98 is to tension the foldable sections 68 and 70 downwardly toward each other, as shown in FIGURES 1 and 2, so as to stretch, under tension, across the top of the frame 44, an awning panel 114, of suitable flexible material as canvas or the like. As shown in FIGURE 8, the awning panel 114 is a substantially square sheet having cut-outs 116 at its corners which define outer and inner end flaps 118

and 120, respectively, and side flaps 122 and 124, respectively.

Longitudinal rows of inner and outer fastener elements 126 and 128 are secured on the flaps, on the lower and upper sides thereof, which are adapted to be securably engaged with each other, to form tubes circumposed on the related arms and bight portions of the foldable sections 68 and 70, and outer and inner cross members of the rectangle 46. A flap portion 130, not so secured on the frame 44, hangs freely over the sleeve 40, as shown in FIGURES 7 and 8.

The awning 10 having been installed, as on a boat gunwale 36, the clamping bolt 18 can be loosened and the post 12 tilted, between erect position and outwardly and inwardly tilted positions, and tightened, so as to locate the frame 44 and the awning panel 114 to provide shade in desired areas, within and without the boat.

While there has been shown and described herein a preferred form of the invention, it is to be understood that the invention is not necessarily confined thereto, and that any change or changes in the structure of and in the relative arrangements of components thereof are contemplated as being within the scope of the invention as defined by the claims appended hereto.

What is claimed is:

1. An awning comprising a post, mounting means on the lower end of said post, a horizontally-disposed sleeve positioned on one side of said post adjacent to the upper end thereof and fixedly secured to said post, an awning frame including a pair of spaced side members, a cross-member extending between and secured to each of the adjacent ends of said side members, a spreader bar ex-

tending transversely between the mid-points of said side members and having its ends pivotally connected to said side members, said frame being horizontally disposed on the side of said post adjacent said sleeve and having one of its cross-members extending through and rigidly affixed to said sleeve, a U-shaped section embodying a bight and a pair of legs projecting from said bight positioned outwardly of each side member with the bight extending along and parallel to the adjacent side member and the legs perpendicular to the adjacent side member and having the free ends of its legs hingedly connected to the adjacent side member, and a stretcher cord extending between and operatively connected to the mid-points of the bights of said sections for holding the sections in position outwardly of the side members of said awning frame.

2. The awning according to claim 1 which includes in addition a prop bar having one end fixed to the mid-portion of said spreader bar and having the other end provided with means for detachable attachment to means provided on said post below and adjacent said sleeve.

References Cited in the file of this patent

UNITED STATES PATENTS

557,605	Reid	Apr. 7, 1896
571,443	Hollingsworth	Nov. 17, 1896
882,870	Cary	Mar. 24, 1908
2,584,432	Marco	Feb. 5, 1952
2,700,389	Butcher et al.	Jan. 25, 1955
2,821,204	Hartshorn	Jan. 28, 1958