March 29, 1960 C. A. STREICH ET AL 2,930,387

PORTABLE BOAT SHELTER

Filed Dec. 12, 1957

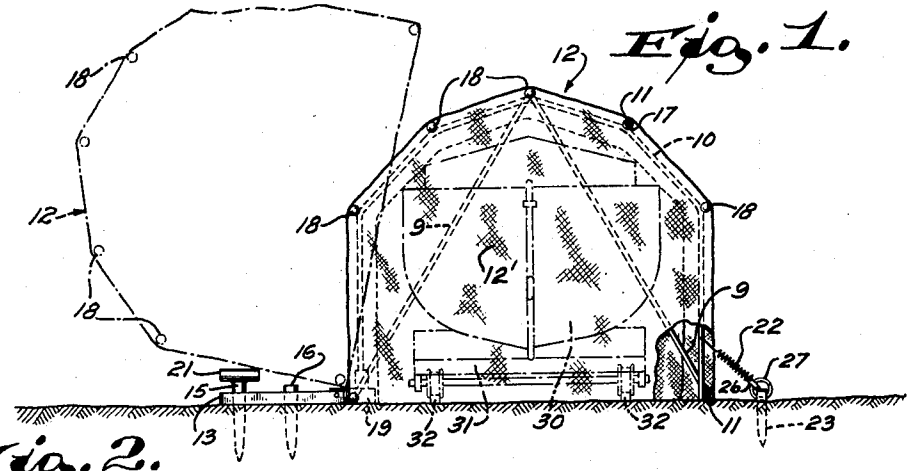


Fig. 1.

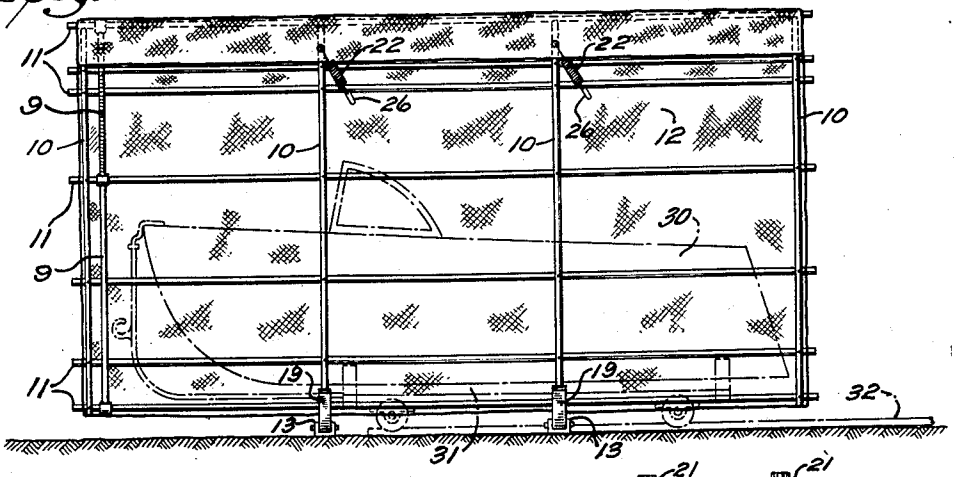


Fig. 2.

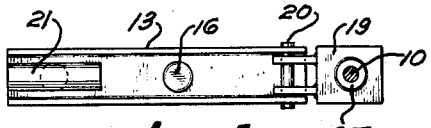


Fig. 5.

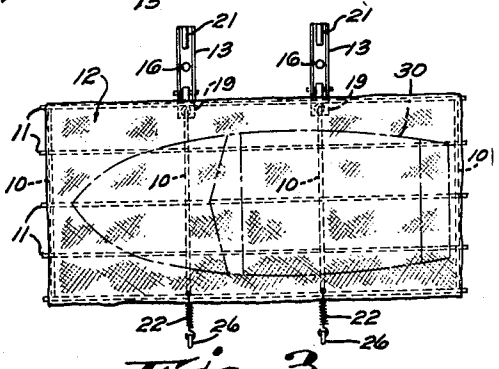


Fig. 3.

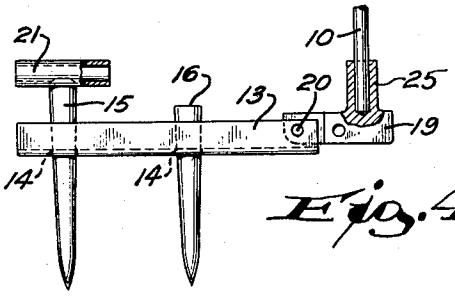


Fig. 4.

INVENTORS
Charles A. Streich
Russell H. Morey
BY
Mosull & Mosull
ATTORNEYS.

United States Patent Office 2,930,387 Patented Mar. 29, 1960

2,930,387

PORTABLE BOAT SHELTER

Charles A. Streich and Russell H. Morey, Oshkosh, Wis.

Application December 12, 1957, Serial No. 702,422

2 Claims. (Cl. 135—1)

The present invention relates to a portable boat shelter which is adapted to protect motor boats and other water craft when they are not being used.

A more particular object of the invention is to provide a compact shelter, constructed of light weight materials, which can be easily transported to any desired location near a body of water to provide a convenient housing for boats. The invention can be set up on a beach close to the water so that a boat can be manually pulled out of the water to a position under the shelter, or tracks may be installed from the shelter into the water and a winch-operated dolly used to move the boat into and out of the water. In addition, the shelter is of such construction that it may, if desired, be supported over the water on pilings or the like.

A further particular object of the present invention is to provide a portable boat shelter which may be conveniently formed of a tubular metal framework covered with water-resistant fabric, which shelter is not attached to or structurally dependent upon the boat itself. The separate and independent nature of the present invention is an important feature and provides several advantages over conventional canvas covers which are merely stretched over the top of a boat and fastened to the deck. Such conventional means, in addition to necessitating numerous fastening elements which are permanently mounted on the deck and detract from the beauty and style of the craft, provide inadequate protection for the hull and lower portions of the boat. In addition, such conventional canvas covers require considerable manual effort in pulling them taut and tediously fastening them to the deck, which chore is eliminated in an independent shelter. The present invention provides a complete, compact, protective housing, with its unique semi-circular cross-section covering the entire boat.

Light weight protective housings are known to the prior art in connection with devices other than boat shelters such as automobiles. The present invention, however, is so constructed as to render it particularly suitable for boats.

Being of a compact nature in order to enhance its portability as aforesaid, and of minimum height in order to detract as little as possible from the surrounding scenery, the lateral swingability of the shelter permits it to be instantly swung to one side to allow a person to pull a boat into or out of it without interference from the structure and without stooping or bending over.

Another advantage of the present invention is that it may be utilized throughout the entire year, even in the most intemperate climates, thereby eliminating indoor storage costs. In winter, it is merely necessary to relocate the shelter further up on the shore, beyond the ice zone, and to fasten flaps over the open ends so that the boat will be entirely covered. Securely anchored by means of iron stakes driven into the ground, the shelter provides a completely weather-proof and protective enclosure.

A further specific object of the present invention is to provide a portable boat shelter so constructed that it is exceedingly durable and long-lasting.

Another important object of the invention is to provide a boat shelter which is relatively inexpensive, the cost of permanent boat shelters of comparable protective qualities and convenience far exceeding that of the present invention.

Still further objects and advantages of the present invention will appear from the following detailed description and accompanying drawings, in which like characters designate corresponding parts in all of the views, and wherein:

Fig. 1 is an end view of the portable boat shelter with end flaps attached thereon and showing, in broken lines, the upwardly tilted position of the shelter, part of an end flap being broken away;

Fig. 2 is a side elevational view of the shelter in its tilted position, and without the end flaps;

Fig. 3 is a top view of the shelter;

Fig. 4 is a side view of one of the laterally extending arms employed on one side of the shelter, showing the anchoring stakes and hinge attachment thereon, part being broken away and shown in section; and

Fig. 5 is a top view of the arm illustrated in Fig. 4 without the stakes.

Referring now more particularly to the drawings, the portable boat shelter comprises a metal framework constructed of spaced, supporting, normally upright bows **10** formed of galvanized metal tubing preferably ¾" diameter, and a plurality of longitudinal connecting members **11**, also formed of galvanized metal tubing, which members connect with and are supported by said bows **10**. It will be noted that four supporting bows **10** and seven connecting members **11** have been utilized in the illustrated form of the invention. This particular number and arrangement of framework members has been found to be very satisfactory as it provides sufficient strength without making the shelter unduly heavy, but it is not intended that the framework be limited to the specific structural details illustrated.

A covering **12**, preferably of 12-ounce canvas or other light weight water-resistant material, is stretched over said metal framework to form a hood-like cover. The covering may be suitably secured to the supporting bows **10** and longitudinal members **11** to retain it in position on said framework. At the inner end of the framework there may be braces **9**. These braces are omitted from the end toward the water so that the boat can be pulled out of the shelter without going to the bother of swinging the cover open.

The covering **12** is normally left off of the ends. This feature facilitates the ready insertion or withdrawal of a boat. In winter or bad weather, however, canvas may be fastened over the open ends, as at **12'** in Fig. 1, to provide a completely enclosed housing. To fasten the end covers onto the shelter it is merely necessary to insert the ends of the tubular longitudinal members **11** into and through aligned grommeted holes **17** formed in the end covers **12'** and to slip rubber retaining caps **18** over the tube ends.

Referring now to Figs. 3, 4 and 5, spaced metal arms **13** preferably in the form of channels are hinged to the bottom of one side of the metal framework and extend laterally outwardly therefrom. Said arms **13** provide ground anchoring means to secure the shelter against strong winds, there being a pair of spaced holes **14** in each of said arms for the reception of stakes **15** and **16**, as best appears in Fig. 4.

In the preferred form of the invention the stakes **16** nearer the shelter may be approximately four feet in

length, while the stakes **15**, which are further removed from said shelter, may be approximately four and one-half feet long to allow a six inch portion to project above the arms **13** when said stakes are driven into the ground, the purpose of which will be hereinafter explained.

A hinge bracket **19** is pivoted to the inner end of each of the arms **13** on a pivot bolt **20**. Said hinge brackets have upstanding tubes **25** into which lower ends of the intermediate members **10** may be removably slipped as shown in Fig. 4. Thus, the framework can be swung upwardly and laterally outwardly about the axis formed by the pivot bolts **20** to the laterally offset tilted position shown in Fig. 2 and, in broken lines, in Fig. 1.

The aforementioned vertical projections provided by the upper ends of the outermost stakes **15** form a stop to prevent the shelter from being swung or tilted too far so that it is easier to close. A rubber covered metal tube **21**, carried by the upper end of each stake **15**, is engaged by one of the bowed tubes **10** when the shelter is open as in the dotted lines of Fig. 1. This cushions the shelter and prevents the stake ends from damaging the fabric covering **12** when the shelter is resting upon the stake projections.

As will best appear from Figs. 1 and 3, the shelter is provided with springs **22** which are connected to the tubes **10** of the framework opposite the arms **13**. The free ends of said springs are provided with conventional snaps **26** and are adapted to releasably engage rings **27** on stakes **23**, which stakes may be driven into the ground to secure the shelter in its lowered position and to anchor the same against strong winds or the like. To swing the shelter to its open position, it is merely necessary to unfasten the springs **22** from the stakes **23**, and to manually urge the shelter upwardly to the laterally offset tilted position.

In practice, the compact portable boat shelter comprising the present invention may be easily transported to a desired location and quickly set up to house a boat. The anchoring stakes **15**, **16** and **23** may be driven into the ground at the selected spot and the invention will be ready for use. Tilted upwardly and laterally, a user may pull the boat into position without stooping. After the boat is in position, the shelter may be lowered and the springs **22** snapped onto the stakes **23** to secure the shelter in its closed position and to anchor it from storms or high winds. In winter, or in unusually bad weather, the shelter may be moved to a location sufficiently removed from the ice and the flaps **12'** may be fastened over the open ends to form a completely enclosed protective housing. If desired, the boat may be removed from the shelter without tilting as the braces **9** have been omitted from the end near the shore.

In its enclosed condition the shelter is comparable in protective qualities to a permanent boat house although, of course, far less expensive. An advantage of the present invention over permanent structures is the low, unobtrusive outline presented by the shelter into which the boat **30** on a dolly **31**, rolling on a track **32**, may be readily pulled by a winch or the like. Permanent boat houses are generally quite large, and necessarily block from view much of the water and surrounding landscape. The present invention, however, is relatively small and does not materially affect the esthetic qualities of the shore line.

The independent hood-like shelter comprising the present invention is also superior, in many respects, to the simple canvas sheets which are commonly used to cover

small boats. Stretched over the deck of the boat to protect the interior from rain or waves, such covers must be manually applied and removed, and are generally secured to the boat by means of uncomely fixtures which disfigure the deck surface. More important, such partial covers do not afford protection for the sides and lower portions of the hull and cannot, therefore, be utilized in winter, or in severe weather.

Having by the foregoing description described one specific embodiment of the present invention in considerable detail, it is not intended to limit the scope of the invention thereto, inasmuch as many modifications and variations thereof will be readily apparent to those skilled in the art. Accordingly, such modifications as are within the spirit and scope of the following claims are contemplated by the present invention.

What we claim is:

1. In combination, a portable boat shelter comprising an elongated hood shaped to fit over a boat and having long side portions of greater length than the boat, with lower edges adapted to rest on the ground when the hood is down, said hood including longitudinally spaced inverted U-members whose lower ends are adapted to be adjacent the ground when the hood is down, anchoring means adapted to be anchored to the ground adjacent the lower ends of the U-members at a first side of the hood, and hinge means connecting said lower ends to said anchoring means whereby when the opposite lower ends of the inverted U-members are lifted upwardly the hood may be swung in its entirety to a position where it may rest on said first side, and be supported by the adjacent portions of said inverted U-members to thereby permit entry or withdrawal of a boat from either end in a direction parallel to said long side portions of the hood with unrestricted access to both ends of the boat.

2. In combination, a portable boat shelter comprising an elongated hood shaped to fit over a boat and having long side portions of greater length than the boat with lower edges adapted to rest on the ground when the hood is down, said hood including longitudinally spaced inverted U-members whose lower ends are adapted to be adjacent the ground when the hood is down, spaced parallel rails extending from the exterior parallel to said long sides and having a portion positioned to be spanned by said inverted U-members when the hood is down, a dolly movable on said rails, anchoring means adapted to be anchored to the ground adjacent the lower ends of said inverted U-members on a first side of the hood, and hinge means connecting said lower ends to said anchoring means whereby when the opposite lower ends of the inverted U-members are raised the hood may be transversely swung in its entirety to a position where it may rest on said first side on the adjacent portions of said inverted U-members to thereby permit entry or withdrawal of a boat on the dolly from either end in a direction parallel to said long sides with unrestricted access to both ends of the boat.

References Cited in the file of this patent

UNITED STATES PATENTS

586,927	Beebe	July 20, 1897
2,698,629	Hall	Jan. 4, 1955
2,708,346	Smith	May 17, 1955

FOREIGN PATENTS

251,400	Great Britain	May 6, 1926
422,683	Germany	Dec. 8, 1925