Jan. 20, 1959 L. E. HAMEL 2,869,812

BOAT CLAMP

Filed June 1, 1955 2 Sheets-Sheet 1

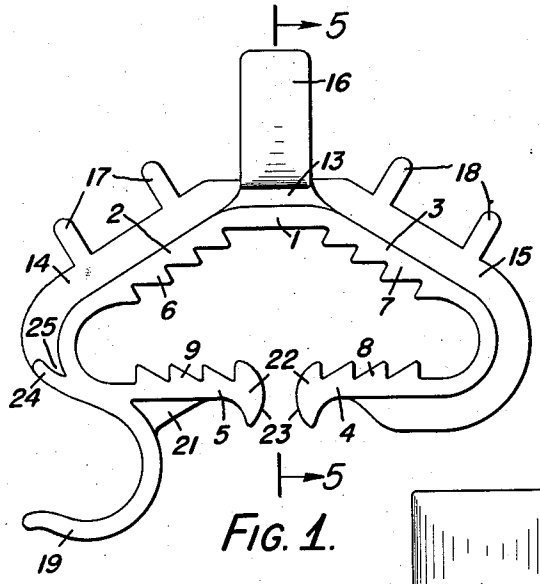


FIG. 1.

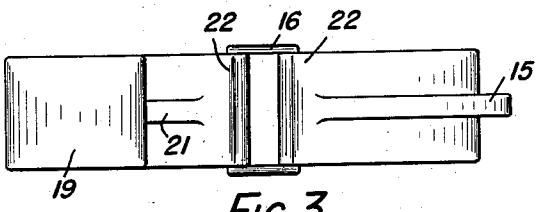


FIG. 3.

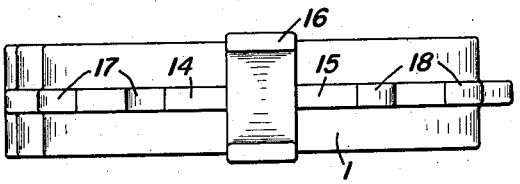


FIG. 4.

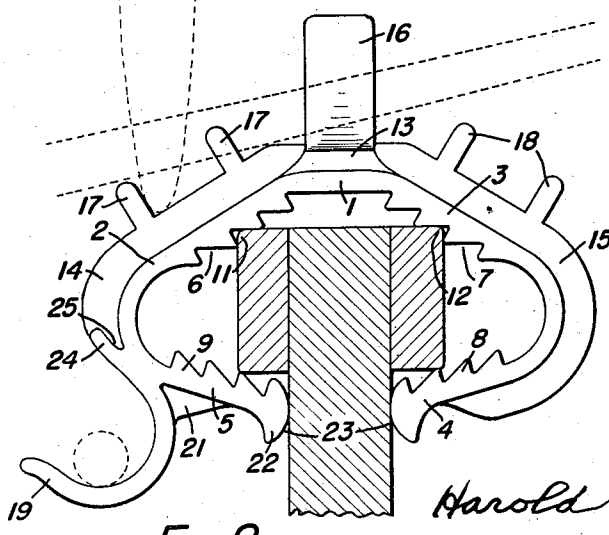


FIG. 2.

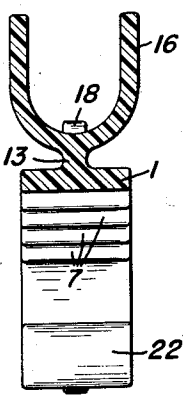


FIG. 5.

INVENTOR.
LEWIS E. HAMEL

BY Harold E. Stonebraker,

HIS ATTORNEY

Jan. 20, 1959 L. E. HAMEL 2,869,812

BOAT CLAMP

Filed June 1, 1955 2 Sheets-Sheet 2

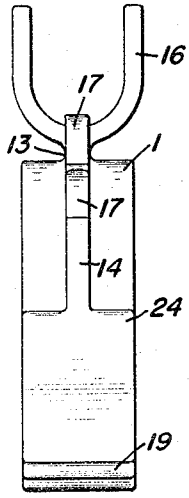


FIG. 6.

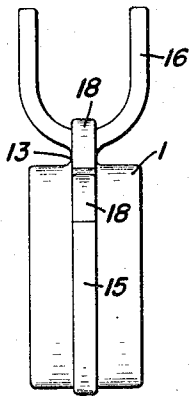


FIG. 7.

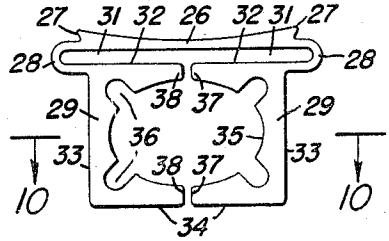


FIG. 8.

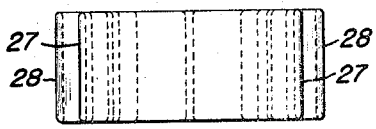


FIG. 9.

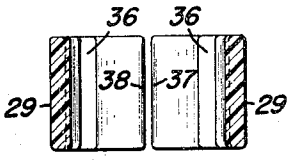


FIG. 10.

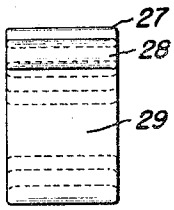


FIG. 11.

FIG. 13.

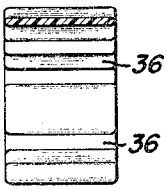


FIG. 12.

INVENTOR.
LEWIS E. HAMEL

BY Harold E. Stonebraker,

HIS ATTORNEY

United States Patent Office 2,869,812 Patented Jan. 20, 1959

2,869,812

BOAT CLAMP

Lewis E. Hamel, Rochester, N. Y., assignor to Lewis E. Hamel Co., Rochester, N. Y., a corporation of New York

Application June 1, 1955, Serial No. 512,398

1 Claim. (Cl. 248—42)

This invention relates to a boat clamp and has for its purpose to provide a device that is readily attachable to the gunwale of a boat for holding fishing rods and oars, and which can be manufactured at a low cost.

Heretofore conventional boat clamps have incorporated attaching means such as a threaded nut and bolt for securing the clamp to the boat, and the present structure is designed to overcome this objection by making the clamp of a hard but slightly yieldable plastic material, enabling it to be forced over the gunwale of a boat, and which when positioned is securely retained in place for holding either a rod, oar, or both.

An additional object is to form the clamp of a material that possesses a sufficient yieldability and resiliency to permit its being forced over the gunwale of a boat while having sufficient hardness to hold the clamp firmly in place, and provided with means that securely engages the gunwale regardless of its cross-section.

Still a further purpose of the invention is to afford a clamp that can be produced in one piece by molding from plastic material at a low manufacturing cost.

To these and other ends the invention consists in the construction and arrangement of parts that will appear clearly from the following description when read in conjunction with the accompanying drawings, the novel features being pointed out in the claims following the specification.

In the drawings:

Fig. 1 is a view in side elevation showing a preferred embodiment of the invention;

Fig. 2 is a similar view showing the invention applied to the gunwale of a boat, and in dotted lines the positions assumed by fishing rods or by an oar;

Fig. 3 is a bottom plan view;

Fig. 4 is a top plan view;

Fig. 5 is a vertical sectional view on line 5—5 of Fig. 1, looking in the direction indicated;

Fig. 6 is an end elevation;

Fig. 7 is an end elevation looking in the opposite direction from Fig. 6;

Fig. 8 is a view in side elevation of an adapter that is employed when fastening the clamp to a metal gunwale that is of different cross-section from that shown with the structure of Figs. 1 to 7;

Fig. 9 is a plan view of the structure shown in Fig. 8;

Fig. 10 is a sectional view on line 10—10 of Fig. 8 looking in the direction indicated;

Fig. 11 is an end elevation of the structure shown in Fig. 8;

Fig. 12 is a vertical sectional view taken centrally of Fig. 11; and

Fig. 13 is a view in side elevation showing the adapter of Figs. 8 to 12 secured in the clamp illustrated in Figs. 1 to 7, and attached to a metal gunwale of conventional form.

Referring more particularly to the drawings in which like reference numerals refer to the same parts throughout the several views, the clamp is formed from a hard

and slightly yieldable material such as "Tenite" or other polyethylene or suitable material having the required characteristics, and is molded into the form shown, preferably consisting of a top portion 1, and downwardly diverging gripping arms 2 and 3 which merge into retaining arms 4 and 5 respectively, that extend inwardly in a generally horizontal plane, and terminate at their inner ends in spaced relation to each other.

The gripping arms 2 and 3 are provided on their inner surfaces with means for interlocking with adjacent portions of the gunwale of a boat, preferably consisting of transverse notches or grooves 6 and 7 respectively, while the inner surfaces of the retaining arms 4 and 5 are provided with transverse notches or grooves 8 and 9 respectively which engage adjacent surfaces of the gunwale, all as shown in Fig. 2, where opposite notches 6 and 7 engage the corners 11 and 12 respectively of the gunwale, while the bottom of the gunwale rests on the retaining arms 4 and 5 respectively and on portions of the notches 8 and 9, or the teeth formed thereby.

In placing the clamp in operating position, the retaining arms 4 and 5 are spread apart sufficiently to be passed over the widest portion of the gunwale and the clamp is then pushed downwardly until it engages the top surface of the gunwale. The retaining arms 4 and 5 upon being released then spring inwardly and upwardly as far as they are permitted to go by the bottom of the gunwale, the arms 4 and 5 being sufficiently yieldable to permit their spreading apart around the sides of the gunwale, and sufficiently hard or rigid to retain the clamp in position by engagement with the undersurface of the gunwale when the gripping arms are engaged with the upper corners of the gunwale as shown in Fig. 2. The clamp is then held firmly on the side of the boat as securely as one held by a metal clamp, or other fastening means.

The top portion 1 of the clamp, also the gripping and retaining arms, are approximately the width shown, and the top portion 1 is provided with a central rib 13 which is a continuation of central ribs 14 and 15 formed on the gripping and retaining arms and extending longitudianlly thereof and centrally between their opposite edges, as shown affording strength and rigidity to the gripping and retaining arms.

16 designates an upwardly extending U-shaped rod holder formed integrally with rib 13 on the top portion 1, while 17 and 18 designate outwardly extending projections or posts formed on the central ribs 14 and 15 respectively and acting to hold or support an oar which may be positioned therein as shown in Fig. 2 in dotted lines. Formed at the lower end of the gripping arm 2 is a U-shaped rod holder 19 which extends downwardly and outwardly between the gripping arm 2 and the retaining arm 5, enabling supporting a rod therein as shown in dotted lines in Fig. 2, and 21 designates a strengthening web formed integral with the U-shaped rod holder 19 and retaining arm 5, and located therebeneath as shown.

The retaining arms 4 and 5 are formed with enlargements 22 at their inner ends which are spaced from each other, and impart added strength to the retaining arms while the curved surfaces 23 of the enlargements permit readily sliding the retaining arms over the gunwale of a boat for attaching or for removing it therefrom. The U-shaped rod holder 19 is provided at its inner end with the extension 24, the outer surface of which is a continuation of the outer edge of rib 14, imparting strength to the U-shaped rod holder 19, while 25 designates a cut-out portion or recess between the extension 24 and the retaining arm 5 in order to impart increased resiliency or yieldability to the clamp.

With this construction, four clamps may be used, two on each side of a boat at the front and rear ends, in which case one fishing rod may be supported with its front end

in the U-shaped holder **16** while the reel end is held by the fisherman, and a second rod may be positioned on two rod holders **19** located at the front and rear of the boat respectively and on the same side thereof, also one or more oars may be positioned and supported on any two posts **17** or **18** at the two ends of the boat on the same side thereof as indicated in Fig. 2, facilities thus being provided for supporting at least two rods and one or more oars as required, on any two clamps arranged at opposite ends on the same side of a boat.

Fig. 2 illustrates the invention as applied to the gunwale of a conventional wooden rowboat, and in the case of metal boats, the gunwale is frequently so shaped in cross-section as not to permit its being employed to hold a clamp such as illustrated in Figs. 1 to 7 inclusive. In such cases, there is preferably employed an adapter such as shown in Figs. 8 to 13 inclusive, and made of the same material as the clamp described above. The adapter includes a supporting plate **26** that has a preferably concave top surface terminating in tapered edges **27** arranged to engage opposite notches **6** and **7** in the gripping arms, see Fig. 13, while **28** designate flexible walls connecting the top plate **26** with opposite retaining elements **29**, the top surface of each of which is spaced from the top plate **27** as shown at **31** to afford a space for a purpose that will appear presently. Each of the retaining units **29** has a generally rectangular exterior cross-section, providing a top wall **32**, side wall **33** and bottom wall **34**, the retaining unit having a circular or concave cutout portion **35** on its inner surface provided with transverse grooves **36**. The inner ends **37** and **38** of the two retaining units terminate in slightly spaced relation to each other.

With this arrangement and a metal boat having an angular gunwale as shown in Fig. 13, the adapter is first positioned over the gunwale with the horizontal wall **39** of the gunwale located between the top surface **32** of the retaining element **29** and the bottom surface of the top plate **26**, see Fig. 13. The inner end portions of the retaining elements **29** engage opposite surfaces of the vertical wall **41** of the gunwale, after which the clamp shown in Figs. 1 to 7 is forced over the adapter by spreading the retaining arms **4** and **5** sufficiently to permit the clamp to assume the final position illustrated in Fig. 13, and the adapter is thus held securely on the metal gunwale and the clamp is firmly retained on the adapter in the manner shown.

With this construction, the clamp may be applied to any cross-sectional shape of gunwale, the adapter being positionable over a metal T-shaped gunwale, or over a gunwale of square, oval, or other cross-section, in which the top portion of the gunwale is retained in the circular cutout portions of the retaining units with projecting portions of the gunwale engaged in the grooves **36**, while the vertical portion of the gunwale extends downwardly between the retaining elements **39** similarly to the wall **41** illustrated in Fig. 13.

Utilizing either the clamp as shown in Figs. 1 to 7, or the clamp with the adapter as shown from Figs. 8 to 13, the device can be readily and quickly applied to a boat gunwale of any cross-sectional formation and can be maintained securely in position thereon for holding fishing rods or oars. A rod can be maintained with its reel end on the lap of a fisherman and its outer end extending through the holder **16** over the water, or supported in two holders **19** at two ends of the boat, and oars can be supported between any selected two posts **17** at opposite ends of the boat. An oar is thus arranged in a manner that prevents it from dripping into the boat, and also prevents it from projecting over the edge of the boat to a position where it would be likely to strike a barrier and become damaged.

While the invention has been described with reference to a particular construction, the application is not restricted to the construction herein set forth and is intended to cover any modifications or departures that may come within the purposes of the invention or the scope of the following claim.

I claim:

A one-piece boat clamp formed of hard slightly yieldable material and consisting of a top portion, downwardly diverging gripping arms merging into inwardly extending horizontally disposed retaining arms which are spaced from each other at their inner ends, the inner surfaces of said arms having transverse notches adapted to engage four opposite top and bottom edges of a gunwale, the retaining arms diverging downwardly when in clamping position, a U-shaped rod holder extending upwardly from said top portion, and a separate one-piece adapter formed of hard slightly yieldable material and consisting of a supporting plate having ends engaged with said notches in the diverging gripping arms, said plate having underlying spaced extensions integrally connected thereto, and a pair of spaced depending gripping units carried by said extensions and each having vertical sides with bottom edges engaged with the notches in said retaining arms and circular cut-out sockets on their inner surfaces that are adapted to engage part of a support.

References Cited in the file of this patent

UNITED STATES PATENTS

2,385,209	Joyce	Sept. 18, 1945
2,438,085	Woodings et al.	Mar. 16, 1948
2,557,728	Drumb	June 19, 1951
2,696,528	Chesick	Dec. 7, 1954
2,734,205	Preiss	Feb. 15, 1956

FOREIGN PATENTS

1,856	Great Britain	July 20, 1895

UNITED STATES PATENT OFFICE

Certificate of Correction

Patent No. 2,869,812 January 20, 1959

Lewis E. Hamel

It is hereby certified that error appears in the above numbered patent requiring correction and that the said Letters Patent should read as corrected below.

In the grant, lines 2 and 12, and in the heading to the printed specification, lines 3 and 4, name of assignee, for "Lewis E. Hamel Co.", each occurrence, read —Lewis E. Hamel Co., Inc.—.

Signed and sealed this 28th day of April 1959.

[SEAL]

Attest:
T. B. MORROW,
Attesting Officer.

ROBERT C. WATSON,
Commissioner of Patents.