July 19, 1960 E. L. PAYNE 2,945,468

BOAT MOORING

Filed Sept. 22, 1958

Fig. 1.

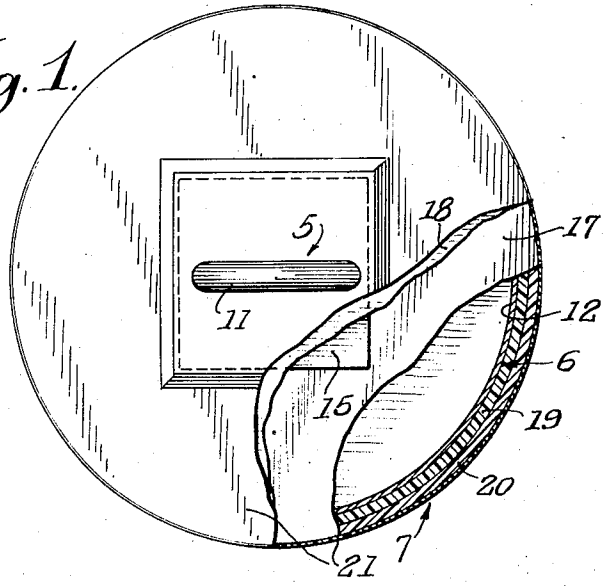
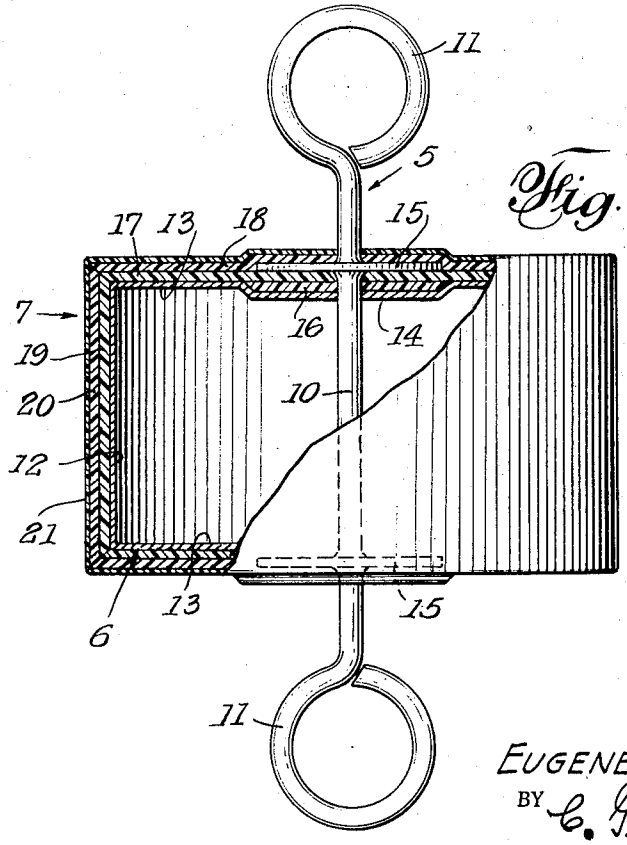


Fig. 2.



INVENTOR.
EUGENE L. PAYNE
BY C. G. Stratton
ATTORNEY

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BOAT MOORING

Eugene L. Payne, 225 21st St., Newport Beach, Calif.

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5 Claims. (Cl. 114—230)

This invention relates to a mooring for small boats.

An object of the invention is to provide an inexpensive, leakproof, rustproof and damage-resistant mooring that may have general use for mooring boats, but which is more particularly useful for mooring small boats.

Since mooring devices may be subject to considerable stresses due to forces set up between a moored boat and the anchor of the mooring, the present invention contemplates a mooring that is strong to resist such forces and yet is light in weight and buoyant also.

The invention also has for its objects to provide such means that are positive in operation, convenient in use, easily installed in a working position and easily disconnected therefrom, economical of manufacture, relatively simple, and of general superiority and serviceability.

The invention also comprises novel details of construction and novel combinations and arrangements of parts, which will more fully appear in the course of the following description. However, the drawing merely shows and the following description merely describes, one embodiment of the present invention, which is given by way of illustration or example only.

In the drawing, like reference characters designate similar parts in the several views.

Fig. 1 is a partly broken top plan view of a mooring according to the present invention.

Fig. 2 is a side elevational view, partly in section, of said mooring.

The present boat mooring comprises, generally, a mooring rod 5, a core 6 located on the rod intermediate its ends, and a leakproof, lightweight cover 7 on said core and completely enclosing the same.

The rod 5 is shown with a central straight part 10 and with end eyes 11, one eye adapted for connection to an anchor and the other to a boat, both connections being through ropes or cables of suitable length. Said rod may be made of a corrosion-resistant metal or be coated for such resistance. In practice, rod of about one-half inch diameter will serve most purposes.

The core 6 is here shown as a cardboard box of which the shape and size may be variable. However, the size, in practice, should be such as to provide the buoyancy desired. In any case, the core 6 is a hollow, thin-walled member wholly enclosed by a peripheral wall or walls 12 and end walls 13. In the present instance, said end walls are preferably provided with inwardly depressed central portions 14. It is through these portions that the rod part 10 passes. Of course, the eyes 11 are formed on the rod after the core is in place or the eyes 11 may be provided on separate rod ends that are welded to the opposite ends of the straight rod part 10.

Said rod, outward of the depressed portions 14 of the core, is provided with enlargements 15. These are of some considerable areal size and, while shown square, may be of any desired shape. The platelike form of these enlargements is preferred for reasons later apparent.

The cover 7 over the core 6 not only completely encloses said core, but also seals around the rod 5 and

particularly around the enlargements 15. Since the latter are quite large in area, it will be clear that the large areal engagement thereof with superimposed parts of the cover 7 insures also against seepage as well as leakage of water into the interior of the covered core provided.

In the present instance, each depression 14 is filled with a section 16 of mat made of glass fibers bonded into thin sheets. Over this section and the surrounding wall 13 is placed a similar mat 17 of glass fibers. By placing a mat 17 beneath each enlargement 15 and a similar mat 18 over these enlargements, the latter are not only completely enclosed by such mats, but have large areal contact therewith. Both ends of the core 6 are covered by the fiber glass mats 16 and 17, and the peripheral wall 12 of the core may be similarly covered by mats 19 and 20, although but one mat may be used for this purpose.

The mats 17, 18 and 19 or 19 and 20 may be saturated with cold-setting resin containing cobalt and a catalyst to the proper proportion whereby the impregnated mats will bond or fuse to each other and to the enlargements 15. Epoxy resin may be used to advantage, although any fast-drying resin, such as dry with one of the cobaltous resin driers, may be used.

Regardless what saturant is used, the mats, being porous, will harden to lend imperviousness to the cover 7.

Finally, the cover 7 may be finished off by a glass fiber textile or cloth 21. This layer may be quite thin and is also saturated as above, so that, upon drying of the saturant, the cloth 21 is impervious and hard.

It will be clear that the covered core will be light, hard, resistant to damage, and completely leakage- and seepage-proof. If damage does occur, the same may be easily repaired because fiber glass, resin-impregnated patches may be applied to repair holes or other such damaged portions.

The moving forces are taken by the rod 5. The glass fiber-covered float or buoy formed as above is not subjected to these forces, the same merely serving its function to float the device.

While the foregoing specification illustrates and describes what I now contemplate to be the best mode of carrying out my invention, the construction is, of course, subject to modification without departing from the spirit and scope of my invention. Therefore, I do not desire to restrict the invention to the particular form of construction illustrated and described, but desire to cover all modifications that may fall within the scope of the appended claims.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

1. In a boat mooring having a through rod with eyes at each end, a hollow float having opposed walls through which said rod extends, said float comprising a thin-walled, hollow core and a laminated cover over said core and comprising sheets of fiber glass impregnated with a bonding resin, and enlargements on the rod and disposed between laminations of the float to hold the rod and float against relative displacement, said core having end walls and the enlargements on the rods being disposed outward of the end walls of the core.

2. In a boat mooring according to claim 1, the end walls of the core through which the rod extends having depressions approximating the size of the flat enlargements, and a filler lamination in each said depression and bonded to a lamination that is adjacent thereto.

3. A boat mooring comprising a metal rod having end eyes for connection to cables, two metal plates rigidly affixed to said rod and longitudinally spaced apart and from the eyes, a cardboard core formed as a thin-walled hollow box having flat end walls, the rod extending centrally through said walls and the mentioned plates being

disposed outside said walls, laminations of fiber glass covering the outer faces of all of the walls of said box with the mentioned metal plates sandwiched between two of the laminations covering the flat end walls of the box, and a cold-setting resin saturating the fiber glass.

4. A boat mooring according to claim 3 in which the laminations comprise porous mats of fiber glass that are applied individually over the outer surfaces of the box, and the resin comprises a saturant of said mats to render the same impervious to moisture.

5. A boat mooring according to claim 4 in which an outer layer of fiber glass cloth completely encloses the mat laminations, and a cold-setting resin saturating said cloth and bonding the same to the mat laminations.

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