March 31, 1964 S. L. SHEPPERTON 3,126,860

FLEXIBLE MOORING LINE

Filed July 11, 1962

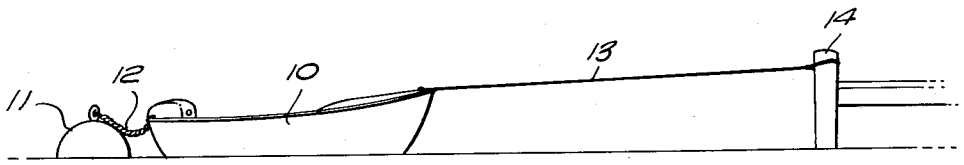


FIG. 1

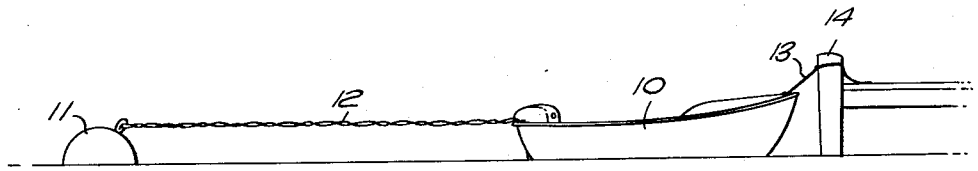


FIG. 1a

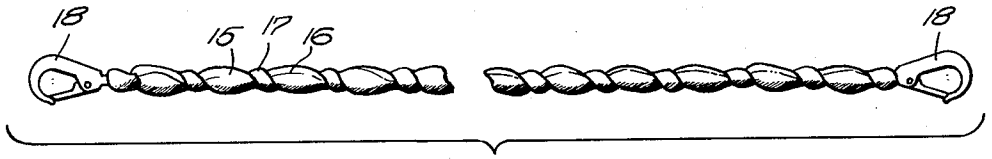


FIG. 2

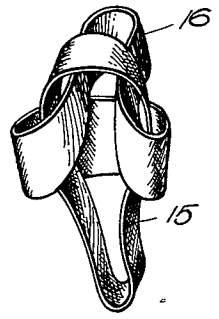


FIG. 3

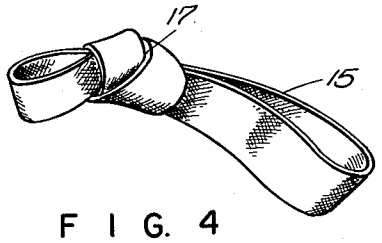


FIG. 4

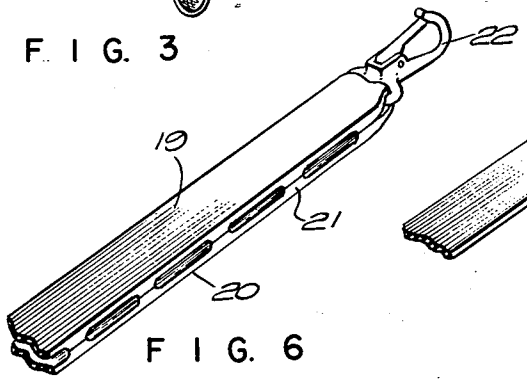


FIG. 6

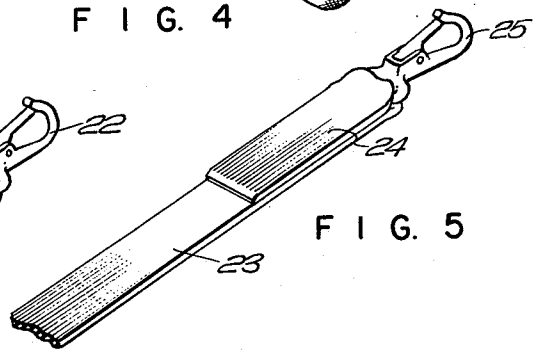


FIG. 5

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United States Patent Office 3,126,860 Patented Mar. 31, 1964

3,126,860

FLEXIBLE MOORING LINE

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Filed July 11, 1962, Ser. No. 209,003
2 Claims. (Cl. 114—230)

My present invention relates to boats and more particularly to a flexible mooring line for a comparatively small boat.

The principal object of the present invention is to provide a flexible mooring line which eliminates the need for a dinghy.

Another object of the present invention is to provide a flexible mooring line which allows the boat to be anchored off shore and thus preventing damage to the boat.

A further object of the present invention is to provide a flexible mooring line which can be used in a marina.

With the above and other objects and advantageous features in view my invention consists of a novel arrangement of parts more fully disclosed in the detailed description following in conjunction with the accompanying drawings and more particularly defined in the appended claims.

In the drawings:

FIG. 1 is a diagrammatic view illustrating the method of anchoring a boat off a dock with applicant's invention.

FIG. 1*a* is a view similar to FIG. 1 showing the method of retrieving the boat.

FIG. 2 is a plan view of a flexible line made by a plurality of interlocked flexible links.

FIG. 3 is a perspective view showing the beginning of the interlocking action of the links.

FIG. 4 is a perspective view showing the completely interlocked link for forming the flexible line shown in FIG. 2.

FIG. 5 is a fragmentary perspective view showing another form of line embodying my invention.

FIG. 6 is a fragmentary perspective view showing still another form of line embodying my invention.

The mooring and boarding of small boats up to approximately eighteen feet in length has always presented a problem. The present invention provides an elastic mooring line which can be used in conjunction with a permanent mooring, a temporary grapple, or permanent overhead cables used at some marinas, to tie stern or bow line. The elastic mooring line allows persons access to craft by pulling the same shoreward or dockward with a bow line while having flexible mooring line attached to a grapple, mooring or stern line cable out and away from shore or dock. When the line is released on a slack bow line, it will again be pulled back out by the flexible line to resume its position away from the dock. This protects the boat and enables parties to land on windward shores without being stranded by outgoing tides or scraping or holing of the bottom by dashing waves' action on rocky shoes. The flexible line can be made up in various colors according to taste or in high visibility yellow as a safety factor.

One methotd of use of the flexible mooring line is illustrated in FIGS. 1 and 1*a*. This form illustrates the use of the mooring line in conjunction with a dock mooring. Referring to FIG. 1, the craft **10** is illustrated adjacent a mooring **11** to which it is attached by the novel flexible mooring line **12**. The craft **10** is also equipped with a standard light bow line **13** which extends to the dock mooring **14**. Now referring to FIG. 1*a*, when a person wishes to board the boat **10** he merely grasps the mooring line **13** and pulls the boat towards the dock simultaneously extending the flexible line **12**. The party now enters the boat **10** and releases the bow line **13** allowing the flexible line **12** to pull the boat outwardly towards the mooring **11**. At this point the flexible line **12** is disconnected from the mooring and the boat is ready to proceed. In tieing up the boat, the flexible mooring line **12** is attached to the mooring **11** and the power of the boat is used to move the boat in proximity to the dock as shown in FIG. 1*a*. The mooring line **13** is now attached and the boat is allowed to move outwardly into the position shown in FIG. 1 at which time the bow line **13** is tied to the dock mooring **14**. Thus the boat is always moored off shore and away from the dock or rocks or other shallow waters but is always completely accessible without the use of a dinghy.

Applicant has found that a flexible mooring could be constructed as illustrated in FIGS. 2 to 6 inclusive or can be provided as a round elastic rope or a braided elastic rope made up of a plurality of round strands. A good rubber compound will work, but applicant has found that it would be better to compound fifty percent natural rubber and fifty percent neoprene with an anti-fungicide added. Where double strands are used, as illustrated in FIGS. 2 to 6 inclusive, each strand is approximately .065 in thickness and 1½ inches in width. Single strands should be at least .130 in thicknes and 2 inches in width. These elastic mooring lines will extend roughly six and one half times their length and can handle boats up to eighteen feet long having a tensile strength of approximately 2500 pounds per square inch minimum. The line illustrated in FIGS. 2, 3 and 4 comprises a plurality of looped elastic links **15** interconnected by passing one link **16** through the link **15** as shown in FIG. 3 and then pulling tight to form a knot **17** as shown in FIG. 4. Each end of the line can be provided with a conventional snap hook **18**. It is contemplated that on an average twenty-five links will be used making a line approximately seventeen and one-half feet in length. The line will extend to more than one hundred feet.

In the form shown in FIG. 6, the line is composed of a pair of lengths **19** and **20** having integral portions extending towards each other at **21** along its length. The portions **21** can be molded to each other or vulcanized to each other to produce a link effect. The ends can be provided with the usual snap hooks **22**. In the form shown in FIG. 5 the body of the mooring line comprises a length of flexible material **23** doubled on itself to form a two ply line **24** having snap hooks **25** at each end.

The use of the double line illustrated in FIGS. 2 to 6 inclusive provides a safety factor in that regular hemp lines sometimes part without warning. Whereas the flexible line being double tends to part on only one side and the remaining side is still strong enough to hold until the break is noticed and repaired. In the form shown in FIGS. 2 to 4 inclusive the repair is simple in that the broken links can be easily replaced.

I have thus provided a flexible mooring line for a boat which enables the boat to be moored out of harm's way but easily accesible without the use of a dinghy. While rubber has been illustrated, any other elastic material having the desired characteristircs can be used. For example, urethane or other plastic material. Other advantages of the present invention will be readily apparent to a person skilled in the art.

I claim:

1. In a mooring arrangement for a comparatively small boat for mooring to an off shore buoy, said boat being provided with a non-elastic line between the boat and an on shore dock, an elastic mooring line between said boat and said off shore buoy comprising a length of elastic material having a snap hook at each end, said elastic material comprising 50% natural rubber and 50% neoprene, and a fungicide in said mixture, said material extending

to a minimum of 6½ times its length, said material having a tensile strength of a minimum of 2500 p.s.i., said material comprising a double thickness each being .065" in thickness and 1½" in width.

2. In a mooring arrangement for a comparatively small boat for mooring to an off shore buoy, said boat being provided with a non-elastic line between the boat and an on shore dock, an elastic mooring line between said boat and said off shore buoy comprising a length of elastic material having a snap hook at each end, said elastic material comprising 50% natural rubber and 50% neoprene, and a fungicide in said mixture, said material extending to a minimum of 6½ times its length, said material having a tensile strength of a minimum of 2500 p.s.i., said material comprising a chain of looped links.

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