Aug. 30, 1960 J. LE ROY McBRIDE 2,950,700

SHIP'S RATGUARD

Filed Oct. 21, 1957

FIG. 1.

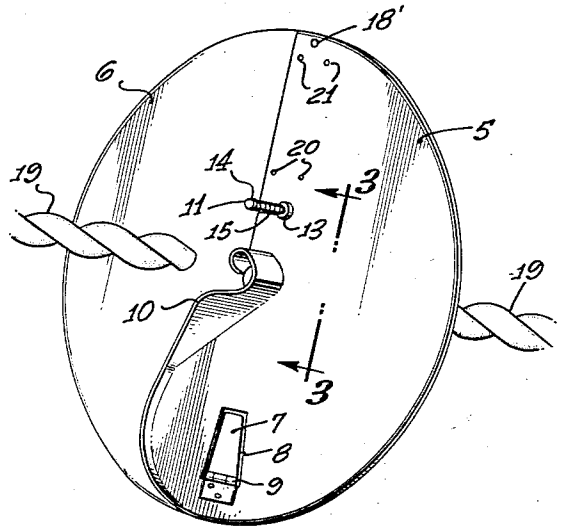


FIG. 2.

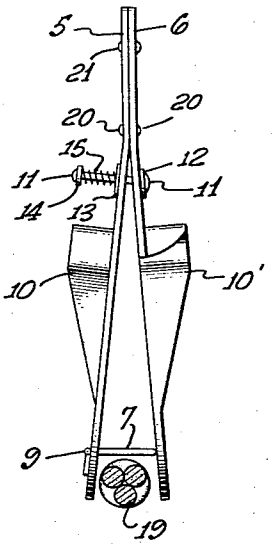
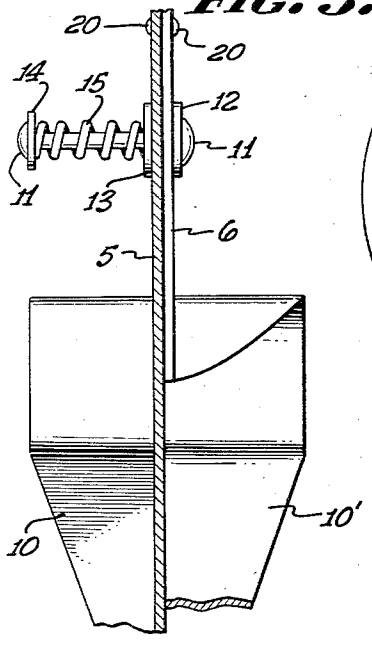


FIG. 3.



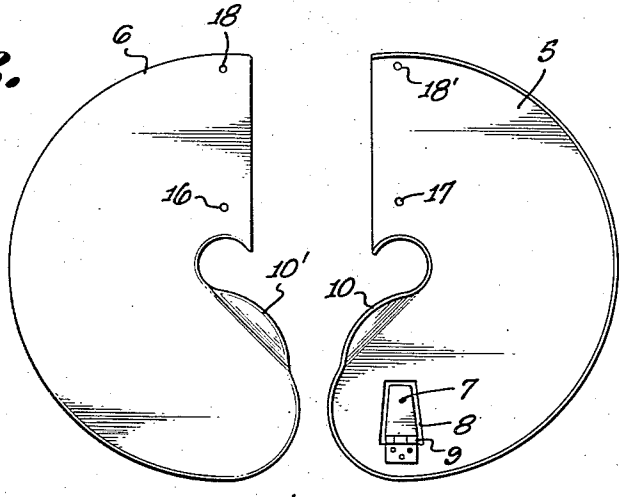


FIG. 4.

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SHIP'S RATGUARD

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1 Claim. (Cl. 114—221)

This invention relates to ratguards, devices applied to ship's hawsers to prevent the passage of rats, mice and analogous animals to or from a ship by way of the hawsers when moored or docked.

The use of ratguards on mechant vessels is of long standing, and a considerable variety of these guards have made their appearance over the years. This variety of inventions points up an undeniable fact, considering the ordinary long-lived ship's implements, namely, that ratguards presently in use have very serious defects.

The most obvious defect of ratguards presently in use is that to be truly effective they must be applied to the ship's mooring lines at a distance considerably removed from the sure footing of the vessel's deck. This fact coupled with the necessity of tightening thumbscrews, or lashing projections to the hawser itself, means that, for all practical purposes, the ratguard is seldom properly applied. Moreover, the varied multiplicity of moving parts on ratguards soon renders them ineffectual.

Some notable attempts have been made to develop ratguards which can be applied to hawsers and remotely locked in position, but each of these fails, for having so many parts they require constant repair and attention, and ultimately, replacement.

With the advent of many new materials now readily available, together with their related superiority in wearing qualities, this invention has for one of its principal objects the production of an improved ratguard which may be constructed economically of thermoplastics, or thermosetting plastics, or thin-gauge metals, or of laminations thereof, or of any combination of the foregoing.

Another object of this invention is to provide a ratguard having novel means for encompassing a hawser when applied thereto, requiring no manual adjustments to maintain proper positioning.

A further object of this invention is to provide a ratguard of this character with improved facility for easy and quick application or removal to or from various sizes of hawsers.

Still another object of this invention is to provide an improved effective ratguard of flexible, resilient material which can be restored to its original shape easily after being subjected to distorting forces, or whose effectiveness is not impaired by distortion.

Other objects and advantages of this invention will be apparent during the course of the following description.

In the drawings, wherein like numerals are employed to designate like parts throughout the views:

Figure 1 is a perspective view showing a ratguard constructed in accordance with the principles of the invention, observing same from the side facing the ship (not shown), and illustrating the ratguard applied to the hawser, which has been shown cut-away for clarity.

Figure 2 is a side elevation illustrating the ratguard about to be applied to the hawser.

Figure 3 is an enlarged fragmentary sectional view taken on the plane of the line 3—3 of Figure 1, looking in the direction of the arrows.

Figure 4 is an elevational view of the ratguard, unassembled in its two sections 5 and 6.

Referring now to the accompanying drawings in detail, the ratguard is shown in Figure 1 as the customary shield-like circular baffle, here constructed of complemental overlapping half sections 5 and 6 respectively, said sections being firmly fastened to one another in the upper portion of the sections, as at 20 and 21 in Figures 1 and 2, so as to provide a registerable opening concentric to the periphery of the baffle for the accommodation of the usual hawser 19.

Half section 5 is provided with an aperture 8 for a cocking-arm 7 attached to a hinge 9. Depending on the material used for fabrication of the baffle sections 5 and 6, cocking-arm 7 and hinge 9 may be magnetized so as to lock the overlapping portions of sections 5 and 6 in the baffle together magnetically.

Both complemental overlapping half sections 5 and 6 are provided with registerable holes 18^1 and 18, respectively, through which a lanyard (not shown) may be rove and fastened, and by which the ratguard may be tethered to the hawser 19 or some portion of the vessel (not shown) to prevent the accidental loss of the ratguard into the sea. Further, the aforementioned lanyard is used to suspend the ratguard during application to the hawser 19, and for lifting therefrom on removal.

Both complemental overlapping sections 5 and 6 are provided with novelly contrived identical collars 10 and 10^1, respectively, so shaped as to hold the baffle when applied, in a position perpendicular to the hawser 19, and to provide total encompassing of the hawser 19.

These collars 10 and 10^1 are additionally provided with an inwardly sloping form shown in Figure 3, which serves to separate the lower overlapping portions of the baffle when a lifting force is exerted at, or in the vicinity of, the registerable holes 18 and 18^1 shown in Figure 2.

Showing the assembled ratguard about to be applied to the hawser 19, is Figure 2, wherein the loverlapping portions of the baffle are cocked open by cocking-arm 7. From the position in which the ratguard is shown in Figure 2, the assembled body is dropped, causing cocking-arm 7 to release and return upright into aperture 8, and hawser 19 to travel along collars 10 and 10^1, whose shapes produce, or impart, a quarter turn of the assembled ratguard bringing hawser 19 into the registerable opening concentric to the periphery of the baffle.

Removal of the ratguard is effected by the exertion of a lifting force applied to the area at, or adjacent to, holes 18 and 18^1, as this force is applied, the novel shape of the collars 10 and 10^1 causes the plane of the ratguard to rotate and become parallel to the hawser 19, which action simultaneously wedges open the lower overlapping portions of sections 5 and 6 releasing the ratguard from the hawser 19.

It is believed that the use and advantages of the invention will be clearly understood by anyone skilled in the art from the foregoing disclosure, considered in conjunction with the accompanying drawings, and accordingly, further description of the invention, at this point, is deemed unnecessary.

While, in the foregoing, there has been described and shown the preferred embodiment of the invention, it is to be understood that the same is susceptible to minor changes in the details of construction, and in the combination and arrangement of parts, and such may be

resorted to without departing from the spirit and scope of the invention as claimed.

Having thus described the invention, what is claimed as new is:

A ratguard for ships' hawsers comprising a pair of sections of sheet material, said sections having adjacent edge portions in overlapped relationship in assembled position, each of said portions having a recess registering with a recess in the other portion in said assembled position to form a hole for receiving a hawser, fastening means securing the faces of said edge portions together on one side of said recesses, each said recess being open on a side adjacent the edge portion for admission of a hawser, each of said sections having a projection extending transversely of the plane of the section to form a lip surrounding a major portion of the recess and extending along the edge portion on the side of the recess opposite said fastening means, each of said projections having a curved surface of slope progressively diminishing from the recess outwardly to a junction with said edge portion whereby to effect camming of the sections on said last identified side of the recesses away from each other when the guard is removed from a hawser, and a releasable closing arm mounted on one section at said last identified side of the recess and having a releasable spreading position of engagement with said sections when the latter are in said assembled position whereby to provide access for the hawser when the guard is placed thereon.

References Cited in the file of this patent

UNITED STATES PATENTS

1,709,225	Mead	Apr. 6, 1929
2,421,151	Johnstone	May 27, 1947