April 16, 1929. W. A. MEAD 1,709,225

RAT GUARD

Filed May 26, 1926

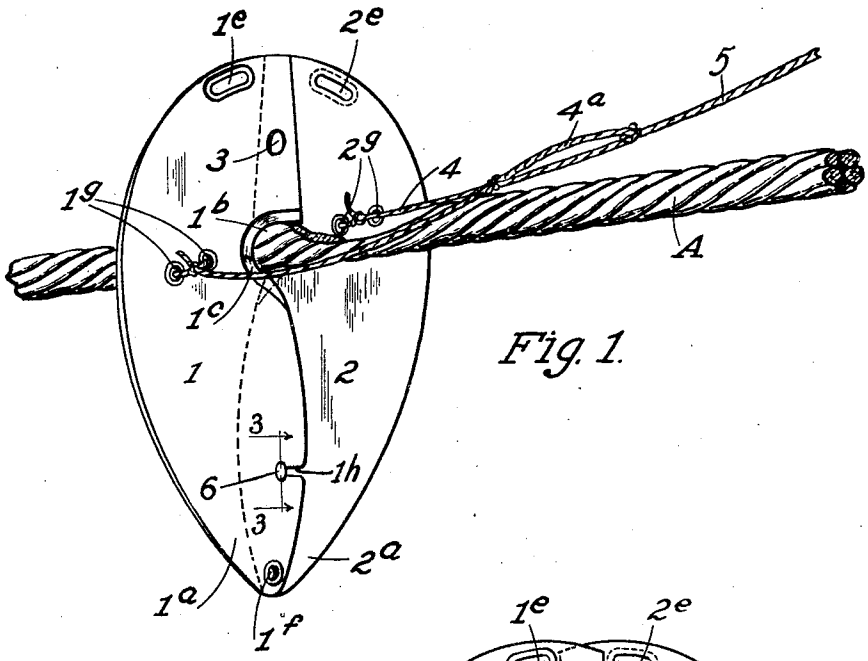


Fig. 1.

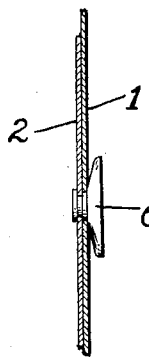


Fig. 3

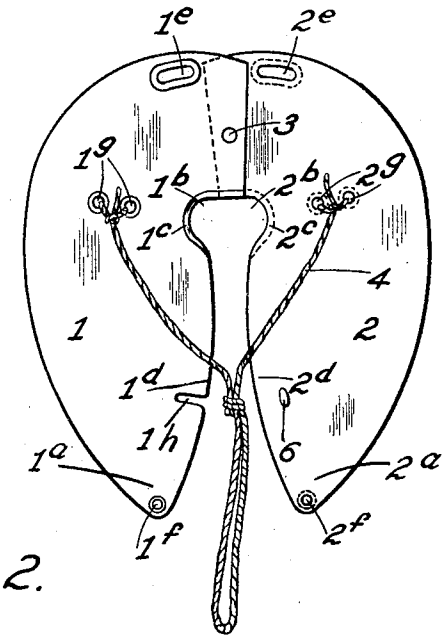


Fig. 2.

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Patented Apr. 16, 1929. 1,709,225

UNITED STATES PATENT OFFICE.

WILLIAM A. MEAD, OF LOS ANGELES, CALIFORNIA.

RAT GUARD.

Application filed May 26, 1926. Serial No. 111,721.

My invention relates to rat guards for preventing rats boarding or leaving a ship when tied to a dock or the like, and the objects of my invention are; first, to provide a rat guard of this class which complies with the Government's requirements, which is easy to position on the ship's hauser, fender or the like in the proper spaced relation from the ship and dock and easy to remove therefrom; second, to provide a rat guard of this class which is flat and therefore will require very small storage space when not in use; third, to provide a rat guard of this class which is so constructed and supported by a string or the like that the two members of the guard will automatically open up to pass over the hauser and when released will automatically close over the hauser by the action of gravity; fourth, to provide a rat guard of this class which may be removed from the hauser with one hand of the operator, if desired, by simply lifting the guard off the hauser; sixth, to provide a rat guard of this class which is not leashed to the hauser; seventh, to provide a rat guard of this class which will be thrown out of equipose with the slightest pressure applied so that if a rat attempts to climb over the guard, it would be thrown overboard; eighth, to provide a rat guard of this class which if the ship changes its position, said guard is pressed up against the dock and flattens out against the dock and is not bent, buckled or injured; and, ninth, to provide a rat guard of this class which is very simple and economical of construction durable, easy to operate, efficient and which will not readily deteriorate or get out of order.

With these and other objects in view as will appear hereinafter, my invention consists of certain novel features of construction, combination and arrangement of parts and portions as will be hereinafter described in detail and particularly set forth in the appended claim, reference being had to the accompanying drawings and to the characters of reference thereon which form a part of this application, in which:

Figure 1 is a perspective view of my rat guard shown positioned on the hauser and ready for use; Fig. 2 is a side elevational view of the same when it is in an opened position ready to be positioned on the hauser, and Fig. 3 is a sectional view on an enlarged scale through 3—3 of Fig. 1.

Similar characters of reference refer to similar parts and portions throughout the views of the drawings.

The guard member 1, guard member 2, rivet 3, string 4, string 5 and guide and support member 6 constitute the principal parts and portions of my rat guard.

The guard members 1 and 2 are substantially duplicates excepting the guide and support member 6 and supporting notch 1^h, and when assembled are positioned in the reverse direction to each other. Each of these members 1 and 2 are made of sheet metal of suitable thickness and to meet the Government requirements; and when positioned together on the hauser are of the proper diameter around the center of the hauser to meet the Government requirements. The lower sides however are extended at 1^a and 2^a to provide sufficient weights for holding the members in certain position in closed relation on the hauser by the force of gravity. These members are pivoted together intermediate their upper edge and the openings upon which they rest on the hauser by means of a rivet which is preferably a copper rivet to prevent fouling by corrosion or rust between the metals. The members overlap each other when positioned on the hauser as shown by the solid and dotted lines in Fig. 1 of the drawings. They are each provided with a circular cut away portion 1^b and 2^b and the metal is turned back against itself at 1^c and 2^c for reinforcing at this point also providing a rounded edge so that the guard will not cut or damage the hauser and will slide easily upon the same. The members 1 and 2 are also provided with inwardly curved portions 1^d and 2^d to overlap when they are on the hauser and so that they will easily slide over the hauser when positioning and removing the same. The member 1 is provided with a notch 1^h at the opposite side of the cut out portion 1^b from the rivet 3, and the member 2 is provided with a guide and support member 6 which is riveted through the member 2 in position to receive the notch 1^h, and said member 6 is provided with a relatively large oval shaped head with a curved under side, as shown best in Fig. 3 of the drawings. The notch is preferably in the form of an arcuate slot with the axis of the rivet as a center and extends a considerable distance inwardly from the edge of the member 1 adjacent the corresponding edge of the member 2. The member 6 is adapted to hold the free end of

the members 1 and 2 together when the device is placed over the hauser, even though the hausers may vary considerably in diameter. The curved or beveled under or inner side of the member 6 is adapted to facilitate the introduction of the shank thereof into the slot 1^h when the free ends of the members 1 and 2 are separated slightly with respect to the normally adjacent flat sides thereof. These members 1 and 2 are also provided with hand holes 1^e and 2^e, around the edges of which the metal is turned over against itself for reinforcement and providing rounded edges so that it will not injure the hands of the operator in handling the same. They are also provided in their lower ends with holes 1^f and 2^f which are adapted for leashing the members together to prevent their bending or buckling when packing and storing away, it being noted that the end of the string 4 may be passed through the holes 1^f and 2^f and tied. It is not necessary however to leash them together at their lower ends when the rat guard is positioned on the hauser and in use. Each of the members is also provided with a pair of spaced apart holes 1^g and 2^g which are provided with turned over portions or are provided with eyelets for reinforcing the edges and preventing the cutting of the marline string 4 which is secured at its opposite ends through the holes 1^g and 2^g, thus forming a loop of suitable length as shown best in the drawings. To this loop 4^a is tied a piece of marline string all of which may be prepared below deck and made ready before the ship reaches the dock. The other end of the marline string 5 is secured to the ship, the pieces of marline string 4 and 5 being of the proper length for positioning the rat guard the proper distance from the ship and from the mooring point.

The operation is as follows: a piece of marline string is secured at its one end to the ship and at its other end in the loop portion 4^a of the marline string 4. The marline string 4 is grasped by the operator and the rat guard lifted up over the hauser A, the lower side being automatically spread and assuming the position shown in Fig. 2 by their weight on the string in the hands of the operator and when the same is dropped over the hauser and released, it assumes the position shown in Fig. 1 of the drawings and can be easily pushed out on the hauser to the required distance from the ship. In removing the guard the marline string is drawn in and the rat guard slides toward the ship within reach of the operator and by grasping the string 4, the guard is lifted free from the hauser, the members 1 and 2 spreading at the lower end. The marline string 5 is then released and if desired the lower ends may be leashed together with the marline through the holes 1^f and 2^f and the guard stored away. This entire operation, it will be noted, can be performed without leaning over or assuming dangerous positions.

Though I have shown and described a particular construction, combination and arrangement of parts and portions, I do not wish to be limited to this particular construction, combination and arrangement, but desire to include in the scope of my invention the construction, combination and arrangement substantially as set forth in the appended claim.

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

In a rat guard, a pair of pivotally connected flat plate members provided with an approximately central opening when connected and with extended portions for balancing and supporting the same in closed relation, and guide and beveled supporting means for guiding the extended ends of said plate members and forcing them toward each other when shifted toward each other about their pivotal axes and for holding the lower extended ends of said plate members in certain relation to each other.

In testimony whereof, I have hereunto set my hand at Los Angeles, California, this 19th day of May, 1926.

WILLIAM A. MEAD.