

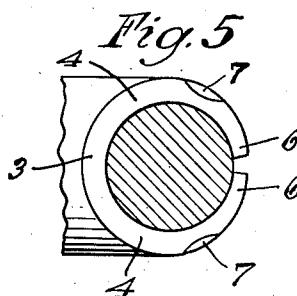
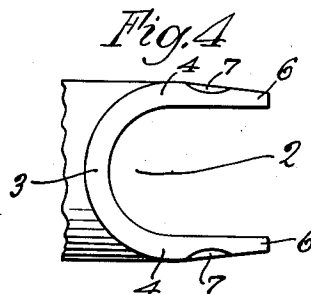
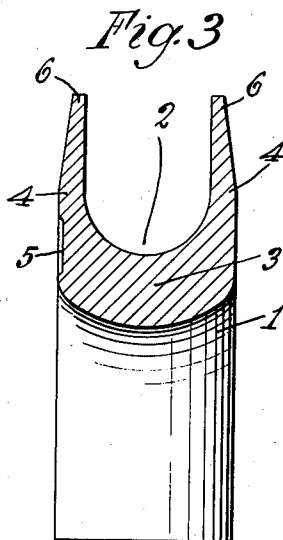
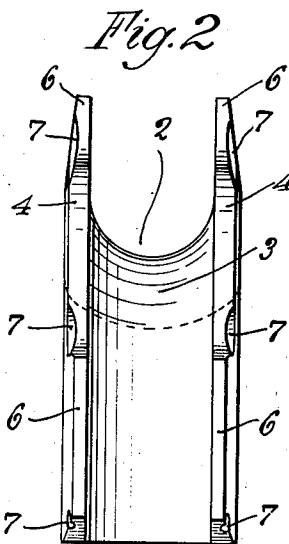
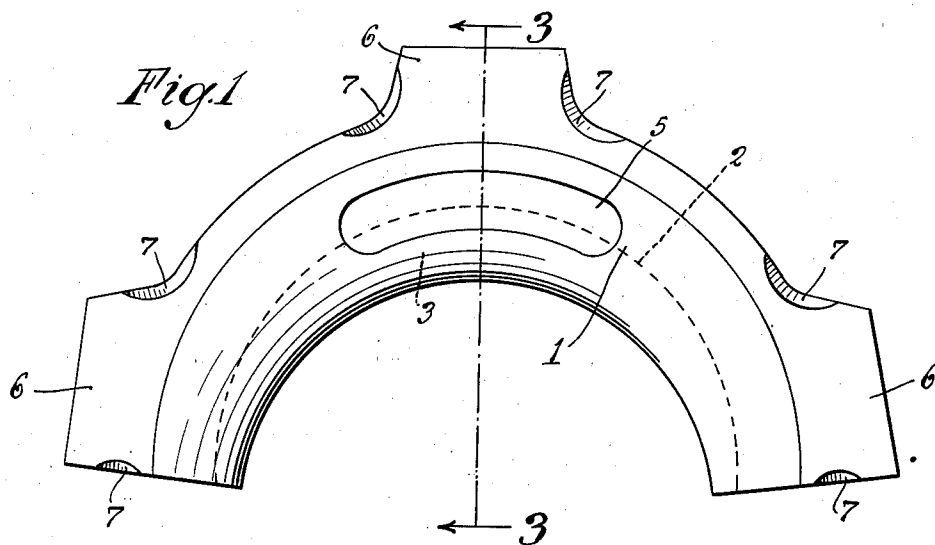
May 6, 1941.

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2,241,221

THIMBLE

Filed March 6, 1939



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UNITED STATES PATENT OFFICE

2,241,221

THIMBLE

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Application March 6, 1939, Serial No. 260,144

7 Claims. (Cl. 114—115)

This invention relates to a "thimble" of the type intended primarily for use in connection with ropes and cables in which a portion of the rope is put about the thimble.

In one form the rope is made into an eye which is positioned about the thimble. The thimble may, of course, be used in connection with a rope which has no eye. It may be used anywhere where it is desirable to apply thimbles to a rope.

Another object is to provide a thimble of simple and strong form in which the thimble is prepared complete and is thereafter applied to a rope and may be bent about the rope to be secured to it.

Another object therefore, is to provide in connection with such a thimble ready deformable means adapted to be bent around the rope.

Other objects will appear from time to time in the course of the specification and claims.

The invention is illustrated more or less diagrammatically in the drawing, wherein:

Figure 1 is a side elevation of one type of the device.

Figure 2 is an end elevation.

Figure 3 is a transverse section taken at line 3—3 of Figure 1.

Figure 4 is a view from one end of the thimble before deformation.

Figure 5 is a similar view after deformation showing a rope in position.

Like parts are designated by like symbols throughout the specification and drawing.

1 designates generally the body of the thimble. It is provided with a groove or channel 2 in its exterior adapted for the reception of a rope. The bottom of the thimble comprises the generally curved member 3, which as shown in particular in Figure 1 is of varying thickness. The thickness being greater at or near the center and decreasing toward the ends. It will be noticed also that the curvature of the inside or upper surface of the member 3 is greater than the curvature of outside or lower surface of that member.

Side walls 4, 4 are joined to the bottom member 3 to complete the thimble. Either or both ends of the side walls may or may not have an indentation in which there may be positioned information such as the size or capacity of the piece, the manufacturer's name or any other information that it is desired to make a permanent part of the thimble.

Positioned at several points along the outer edges of the side walls 4, 4 and formed integrally

with those walls, are pairs of outwardly extending ears 6—6. Since the ears are to be bent inwardly to embrace and secure a rope, provision is made with their corners or ends to prevent fracture and to simplify bending. In the particular form here shown, the corners or ends of the ears 6 are provided with reduced portions 7. These reduced portions are of such size and shape that they extend preferably to some degree into the material of the side walls 4 and thus both the ears and the adjoining side wall portions are tapered and shaped to make bending convenient and prevent fracture or undue distortion. A depressed area 5 may be left on one side of the thimble, if desired. Such an area is convenient for the insertion of numbers, dimensions, trade-marks, manufacturers' names and the like.

After the thimble, as shown in Figure 4, has been made, a rope is positioned in it so that it lies in the groove 2 and against the inner or upper surface of the member 3 and the ears are then bent inwardly toward each other and about the rope so that the rope is embraced by the ears and is held in place in the thimble. Whether or not the rope is held against sliding in the thimble, is a matter of choice. The ears may be forced in so strongly that they prevent such sliding or they may be forced in to a less degree in which case sliding is possible. But when the ears are bent inwardly they serve to prevent the rope from coming out of the thimble entirely.

The reducing or thinning shown at 7 might be of a different size and extent. It might, also, be on the inside of the lugs or ears 6 and many changes in this feature might be made without departing from the spirit of the invention which is not limited specifically to the exact proportion or arrangement shown in this respect. While a single rope is shown in Figure 5, obviously the thimble can be used in connection with any sort of a rope such as a multi-part manila or wire rope or even a single solid wire. The invention is, therefore, not limited to use in connection with any particular type of wire or rope.

Although I have shown an operative form of my device, it will be understood that many changes in the form, shape and arrangement of parts might be made without departing from the spirit of my invention; and I wish that my showing be taken as in a sense diagrammatic.

I claim:

1. A rope thimble comprising a generally curved body, said body portion being convex on

its under surface and concave on its upper surface, and a pair of integral side walls projecting from the concave side of said body, and a plurality of integral, flexible ears projecting outwardly from said side walls, the thickness of said ears being reduced from the point at which each joins a side wall to its outer end, said ears at their sides where they join the side walls being weakened and being otherwise unweakened, said ears adapted to be bent to engage a rope lying about the body portion and between the side walls.

2. A rope thimble comprising a generally curved body of varying thickness, said body having its greatest thickness centrally and decreasing in thickness toward each end, said body portion being convex on its under surface and concave on its upper surface, and a pair of integral side walls projecting from the concave side of said body, and a plurality of integral, flexible ears projecting outwardly from said side walls, each ear at its sides where it joins the side wall being notched and being otherwise unweakened, said ears adapted to be bent to engage a rope lying about the body portion and between the side walls.

3. A rope thimble comprising a generally curved body of varying thickness, said body having its greatest thickness centrally and decreasing in thickness progressively and equally toward each end, said body portion being convex on its under surface and concave on its upper surface, and a pair of integral side walls projecting from the concave side of said body, and a plurality of pairs of integral, flexible ears, projecting outwardly from said side walls, said ears at their sides where they join the side walls being notched and being otherwise unweakened, said ears adapted to be bent to engage a rope lying about the body portion and between the side walls.

4. A rope thimble comprising a generally curved body, said body portion being convex on its under surface and concave on its upper surface, and a pair of integral side walls projecting from the concave side of said body, and a plurality of integral, flexible ears, projecting out-

wardly from said side walls, each ear at its ends where it joins its side wall being weakened by thinning, said thinning being continued into said side wall for a limited distance, one pair of ears being located at the upper center of said thimble, said ears adapted to be bent to engage a rope lying about the body portion and between the side walls.

5. As an article of manufacture, a rope thimble comprising a rigid, generally curved thimble body, side flanges formed integrally with said body, and a plurality of outwardly directed flexible lugs formed integrally with said flanges, said lugs and said flanges being thinned at their adjacent edges and not elsewhere, said lugs adapted to be bent over a rope lying within the space bounded by said body and said flanges.

6. As an article of manufacture, a rope thimble comprising a rigid, generally curved thimble body, said body having its greatest thickness centrally and tapering equally toward its ends, side flanges formed integrally with said body, and a plurality of outwardly directed pairs of flexible lugs formed integrally with said flanges, the said lugs tapering toward their outer ends and being weakened, adjacent their point of juncture with a side wall, by thinning at their sides adjacent said side flanges and away from their outer ends, where they join each other, and not elsewhere, said lugs adapted to be bent over a rope lying within the space bounded by said body and said flanges.

7. As an article of manufacture, a rope thimble comprising a rigid, generally curved thimble body, the ends of said body being out of contact with each other, side flanges formed integrally with said body on its outer face, and a plurality of outwardly directed pairs of lugs formed integrally with said side flanges, the thickness of said lugs and of said flanges being reduced for a limited space at the sides of said lugs where each joins its side flange, said lugs being adapted to be bent over a rope lying within the space bounded by said body and said flanges, the lugs, when bent in place, securing the rope within the thimble.

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