Jan. 20, 1959 G. P. NISSEN 2,869,872

ADJUSTABLE HANDLE FOR A ROPE OR THE LIKE

Filed April 4, 1958

FIG. 1

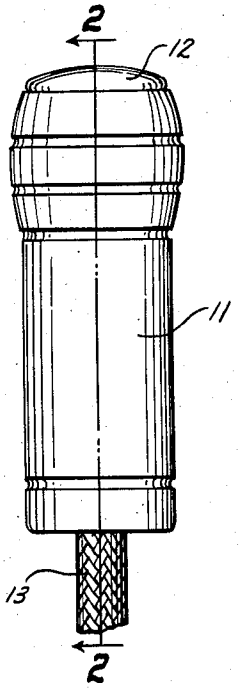


FIG. 2

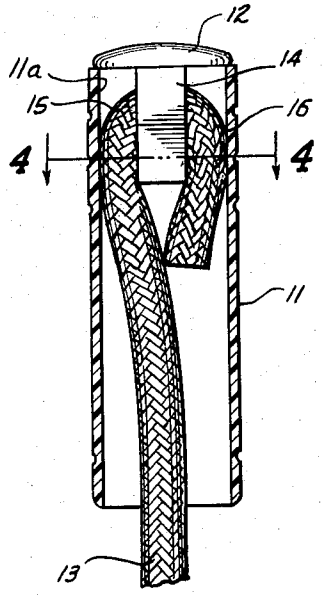


FIG. 3

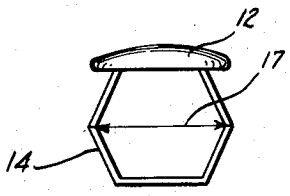


FIG. 4

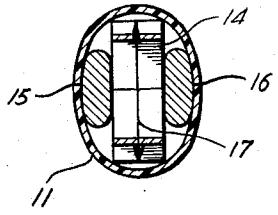
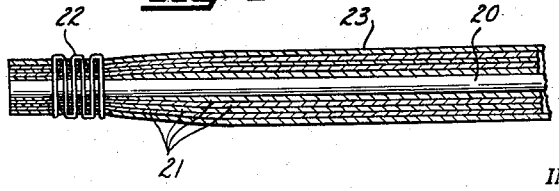


FIG. 5



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ADJUSTABLE HANDLE FOR A ROPE OR THE LIKE

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2 Claims. (Cl. 272—75)

This invention concerns a handle for a jump rope or the like and is more particularly concerned with a handle which may be readily disassembled to permit the longitudinal adjustment of said rope.

In organized and professional athletic programs there is frequent need of good and durable roping which can stand an appreciable amount of usage and, further, a need for handles which can be readily attached or detached from roping of this type and yet handles which are capable of holding their grip on the rope regardless of the strain or pulling forces which may be placed upon them.

It is therefore a primary object of my invention to provide a rope handle which may be quickly attached or detached from the section of rope.

It is a still further object of my invention to provide a handle, which when attached to a piece of rope, will cause a wedging action to occur which will hold the handle in position on the rope regardless of the strain applied to it.

It is yet another object of my invention to provide a detachable handle which may be selectively positioned on the rope at various points and which can be moved without damaging, marking or marring the rope.

Other and further features and objects of the invention will be more apparent to those skilled in the art upon a consideration of the accompanying drawings and following specifications, wherein is disclosed a single exemplary embodiment of the invention, with the understanding, however, that such changes may be made therein as fall within the scope of the appended claims, without departing from the spirit of the invention.

In said drawings:

Figure 1 is a view of a handle constructed according to my invention, a section of rope being positioned therein.

Figure 2 is a longitudinal cross sectional view of the device shown in Figure 1.

Figure 3 is a view of the locking loop employed in Figure 2 to hold the rope in position in the handle.

Figure 4 is an end view of the handle in cross section taken at line 4—4 of Figure 2, and

Figure 5 is a cross sectional view of a section of rope which may be employed in the device shown in Figures 1, 2 and 4.

Referring now to the drawings, and more particularly to Figures 1 and 2; the handle consists of two primary operative portions, the tubular plastic barrel **11** and the removable cap and wedging member **12**. The rope **13** is inserted longitudinally of the barrel member and looped through the ring **14** of the cap **12**.

Both the barrel member and the cap cooperate to hold the rope in position. In making the original operational engagement between the rope and the handle, the cap **12** is removed, the rope **13** is then slid longitudinally of the barrel and looped through the ring **14**. The rope will then be adjusted to the desired length by moving it back and forth through the loop until the proper length is obtained. The cap is then slid longitudinally of the barrel and locked into position in the barrel member.

The barrel member must be formed of a slightly flexible material. A good quality plastic has been found to be an acceptable material for this barrel member. The cap **12** is of metal and the loop or wedging member is also a band of metal. The band of the loop member must be of substantial width as shown in Figure 2. A width substantially equal to the radius of the barrel has been found to be most desirable. It will be noted, from an examination of Figure 2, that the rope is looped about this wedging member so that a portion of the rope lies on each side of the loop, as at **15** and **16**, and is compressed between the edge of the loop and the inner walls of the barrel member.

The loop member also has a cross diameter, as indicated at **17** of Figure 3, and **17** of Figure 4, which is of slightly greater distance than the diameter of the barrel itself. It will be noted that as this band is moved longitudinally within the barrel, the wide section of the loop presses the adjacent wall of the barrel outwardly, which in turn results in the portion of the walls, which are at 90 degrees in relation to the point of control between the wall and loop, to be drawn inwardly against the rope. It will be obvious that this movement of the barrel member causes the rope portions **15** and **16** to be wedged in between the band and the inner face of the barrel wall.

This last pressure, together with the broad dimensioned band and the edges thereof which achieve the wedge function, results in the rope's being very firmly held in this looped position. Since any pulling pressure will be exerted longitudinally within the barrel away from the cap, the cap **12** will be biased against the end of the barrel, and since it is slightly larger diameter, it will make a firm contact with the barrel edges and hold the rope against the longitudinal pressure.

It is of course desirable to utilize a rope which is particularly susceptible to this wedging and compressing action between the band and the wall.

Referring to Figure 5, such a rope structure is shown in cross section. The rope consists of a core portion **20** which is of interlaced longitudinal heavy threads. A second layer of fine strand bulky matting **21** encases this fibrous core. This fine strand material tends to expand outwardly. These two elements, which provide the longitudinal strength to the rope, are encased with a woven fabric cover **23**. The ends of the rope are stitched together, as at **22**, to prevent this layer-like stuffing from working out of the fabric casing. A rope constructed in this manner has considerable strength and bulk and yet is light and easily compressible through this diameter, and by reason of the stitching and structure in layer form, the rope has a very irregular outer surface which further contributes to securing a stable frictional engagement between the loop **14** of the inner walls **11***a* of the barrel member.

It will be seen, from the foregoing description, that I have provided a structure which may be positioned on a rope in a very short period of time or quickly repositioned as the need arises, but that I have also provided a device which will firmly hold the rope in any selected position in relation to a handle and support substantial weight without slippage.

Although I have described a specific embodiment of my invention, it is apparent that modifications thereof may be made by those skilled in the art. Such modifications may be made without departing from the spirit and scope of my invention as set forth in the appended claims.

I claim as my invention:

1. In a handle adapted to be selectively positioned on a compressible rope, a flexible barrel member, a cap of

greater diameter than the inside diameter of said barrel, said cap being adapted to be positioned at one end of said barrel, and a loop positioned on said cap and extending internally of said barrel, said loop having wall portions spaced apart at a distance in excess of the inside diameter of said barrel member, said loop further being of substantial width, whereby said compressible rope member may be inserted longitudinally of said barrel and through said loop, thence back upon itself, the width of said loop being greater than the inside diameter of said barrel to cause the walls adjacent thereto to be forced outwardly, whereby the wall portion 90 degrees radially therefrom shall be drawn inwardly to wedge said rope against said loop.

2. A device as set forth in claim 1, wherein said loop is comprised of a band of metal of a width equal to the radius of said barrel.

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