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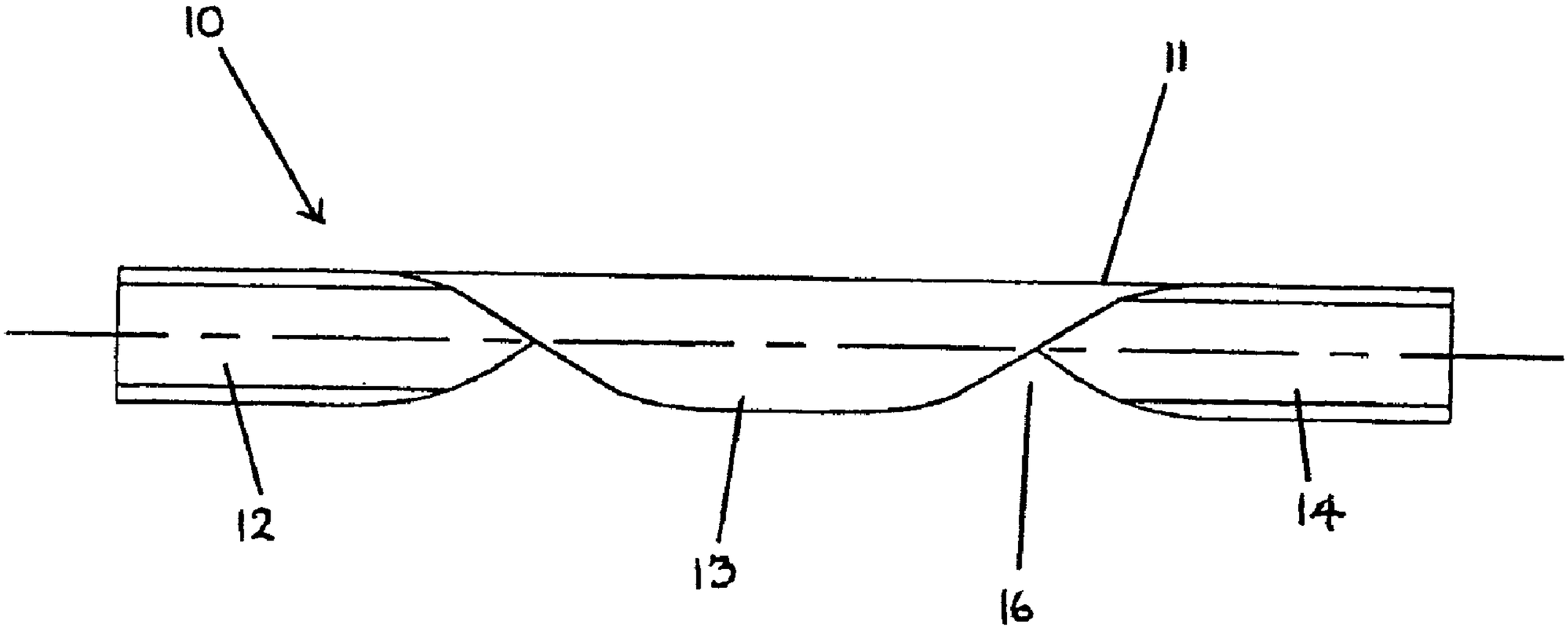
(54) Titre : SUPPORT INTERMEDIAIRE POUR CABLE OU GLISSIERE DE SECURITE ALLONGES
(54) Title: INTERMEDIATE SUPPORT FOR ELONGATE SAFETY LINE OR RAIL



(57) Abrégé/Abstract:
A support (10) for an elongate element (50, see Figure 3) comprises a body portion (11) adapted to restrain a supported elongate element (50) against lateral movement. The body portion (11) has a plurality of partial shells (12, 13, 14) extending therefrom, each partial shell (12, 13, 14) having a cross section substantially conforming to a part of the profile of the elongate element (50) to be supported. Adjacent partial shells (12, 13, 14) extend in opposing lateral directions relative to the longitudinal axis of the support (10). The support (10) may be a split cylinder having a helical groove (16) extending longitudinally of the support (10), the width of the groove (16) being at least equal to the diameter of the elongate element (50) to be supported.

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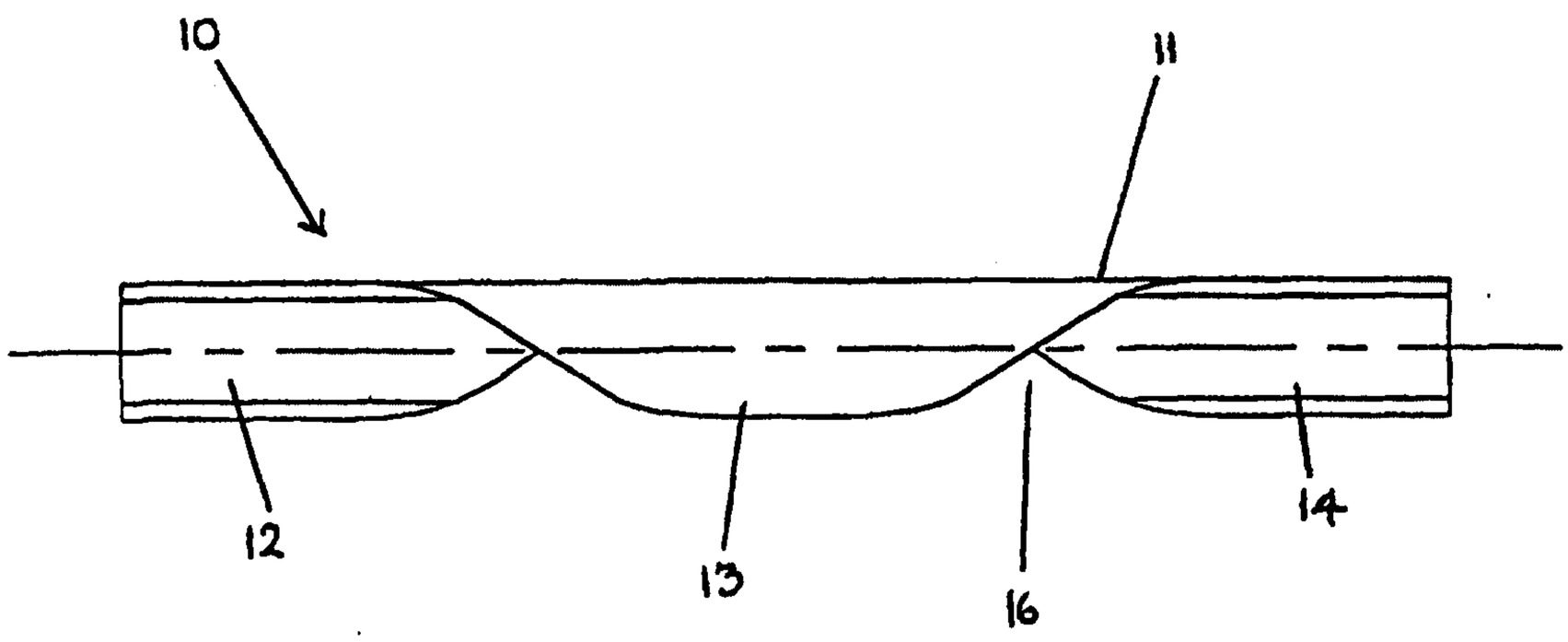
(54) Title: INTERMEDIATE SUPPORT FOR ELONGATE SAFETY LINE OR RAIL



(57) Abstract

A support (10) for an elongate element (50, see Figure 3) comprises a body portion (11) adapted to restrain a supported elongate element (50) against lateral movement. The body portion (11) has a plurality of partial shells (12, 13, 14) extending therefrom, each partial shell (12, 13, 14) having a cross section substantially conforming to a part of the profile of the elongate element (50) to be supported. Adjacent partial shells (12, 13, 14) extend in opposing lateral directions relative to the longitudinal axis of the support (10). The support (10) may be a split cylinder having a helical groove (16) extending longitudinally of the support (10), the width of the groove (16) being at least equal to the diameter of the elongate element (50) to be supported.

INTERMEDIATE SUPPORT FOR ELONGATE SAFETY LINE OR RAIL

The present invention relates to height safety equipment and, in particular, to an intermediate support bracket for an elongate safety line, such as a wire rope or cable, a solid rod or a rail element. Most especially, the invention relates to an intermediate support bracket which is capable of being fitted retrospectively to an existing installation without interruption of the running surface of the safety line, and to a bracket which can be used during installation of a temporary height safety system.

The invention also has applicability in load transfer systems in which loads are suspended from an overhead guide such as a cable, rod or track which requires intermediate supports.

In a permanent installation, the positioning of intermediate brackets to support the elongate safety element can be planned in advance. Usually, bracket spacing will be determined such that long, unsupported spans are avoided. However, it is sometimes the case that a meticulously planned permanent installation requires modification after assembly, for example to compensate for unforeseen wind buffeting in a localised vortex. Temporary installations present a different problem in that the requirements for intermediate supports may not become apparent until the terminal anchors have been fixed.

In the circumstances described above, there is a need to provide retrospective intermediate supports in order to ensure that the elongate safety line is held against lateral movement out of its operating plane, to guarantee safe operation.

It is therefore an object of the present invention to provide an intermediate support for an elongate element such as a personnel safety line or rail, or a load transfer guide element, which is capable of both retrospective fitting and removal without needing to break the element for the fitting or removal thereof.

The invention is an elongate support comprising a body portion adapted to restrain a supported elongate element against lateral movement, said body portion being a split cylinder having a helical groove extending longitudinally of the body portion, and having three partial shells extending therefrom, each partial shell having a cross-section substantially confirming to a part of the profile of the elongate element to be supported, and wherein adjacent partial shells extend in opposed circumferential directions about the longitudinal axis of the body portion, the width of the groove being at least equal to the diameter of the elongate element to be supported.

Embodiments of the invention having more than three partial shells are only of practical utility if the elongate element has a degree of inherent lateral flexibility. Persons skilled in the art will appreciate that too much flexibility in the elongate element will probably render it unsuitable for height safety applications. It is thought that, for the majority of applications, three-shell embodiments of the invention will be used.

The invention will now be described by way of example only with reference to the drawings, in which:

Figure 1 is a front elevation of a support according to the present invention;

Figure 2 is an end view of the support shown in Figure 1, and

Figure 3 is a side view of the support shown in Figures 1 and 2 showing the device installed on an elongate safety cable.

Referring now to Figure 1, this view shows a support 10 for an elongate safety element such as a multi-strand metal cable (not shown). The support 10 comprises a body member 11 having three partial shells 12, 13, 14 extending therefrom. In the orientation of the device as shown with reference to the plane of the drawing, the centre partial shell 13 extends from the top of the support, out of the plane of the page and returns towards the plane of the page at the bottom of the device. By contrast, the two end partial shells 12, 14 extend from the top of the support, **behind** the plane of the page and return towards the plane of the page at the bottom of the device.

When viewed end-on (Figure 2), the support appears to be cylindrical, with a bore 15 dimensioned to receive the elongate element to be supported.

The partial shells 12, 13, 14 are separated from each other by a longitudinal groove 16 which executes a helical path from one end of the support to the other. The width of the groove 16 is selected to be at least equal to the diameter of the elongate element to be supported, otherwise it will not be possible to fit the support to the element by relative lateral movement.

Figure 3 shows a side view of a support 10 installed on an elongate element in the form of a multi-strand metal safety cable 50. Also visible in this view is the associated fixing bracket 20 designed to fasten the support 10 to part of a fixed structure 60. The bracket 20 can be designed in various configurations to suit particular circumstances or situations, and the precise geometry of the bracket does not form part of the present invention.

Although the invention has been particularly described above with reference to a specific embodiment, it will be understood by persons skilled in the art that these are merely illustrative and that variations are possible without departing from the scope of the invention.

CLAIMS:

1. An elongate element support comprising body portion adapted to restrain a supported elongate element against lateral movement, said body portion being a split cylinder having a helical groove extending longitudinally of the body portion, and having three partial shells extending therefrom, each partial shell having a cross-section substantially conforming to a part of the profile of the elongate element to be supported, and wherein adjacent partial shells extend in opposed circumferential directions about the longitudinal axis of the body portion, the width of the groove being at least equal to the diameter of the elongate element to be supported.

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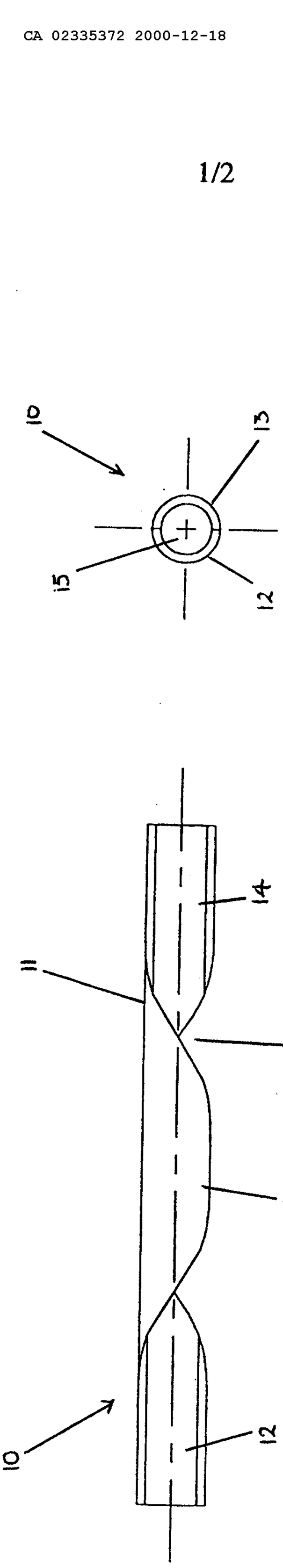


Figure 1

Figure 2

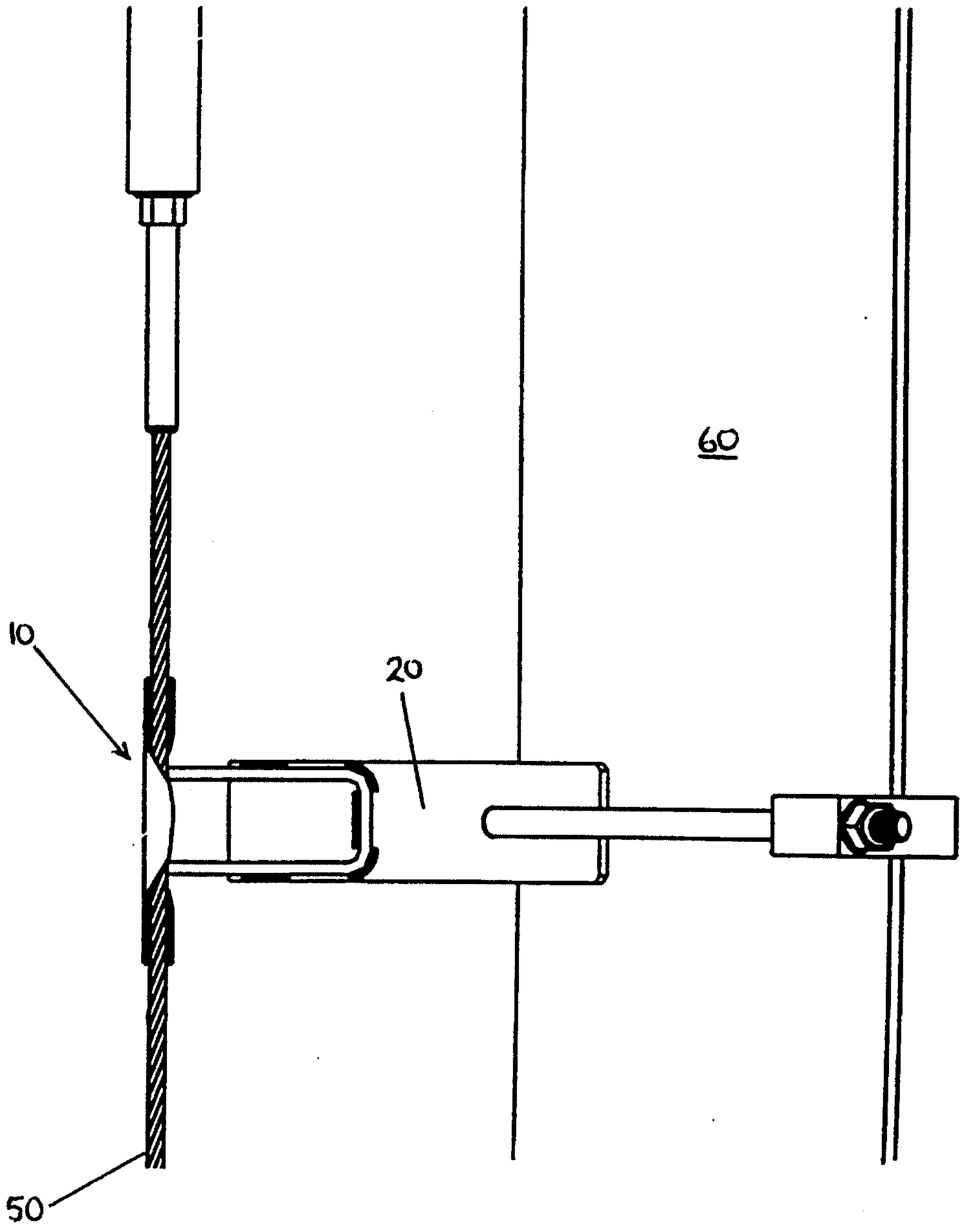
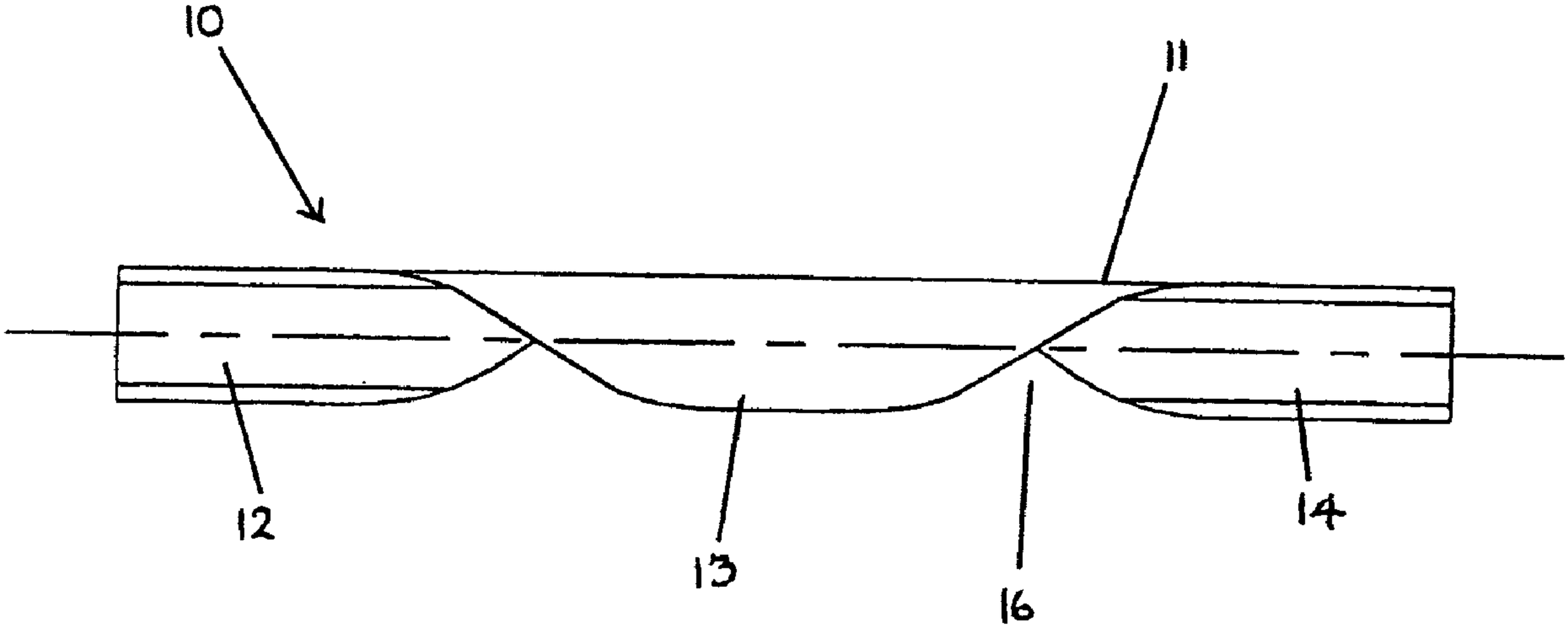


FIGURE 3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