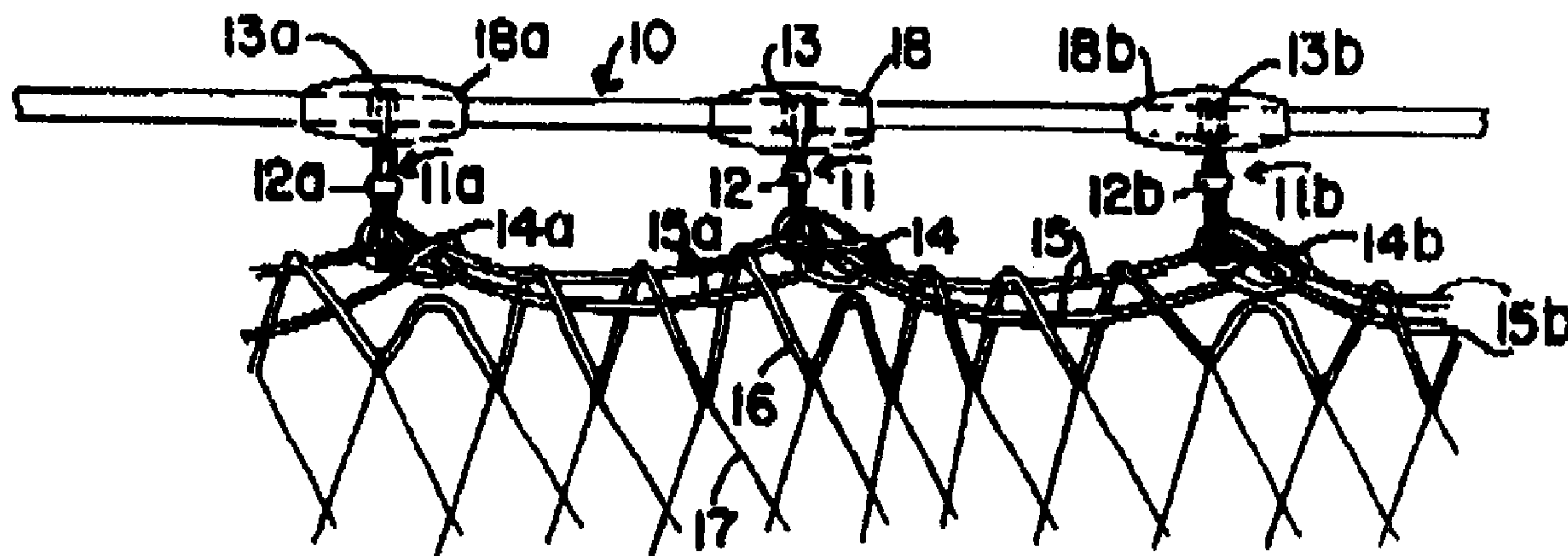




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(54) Titre : SYSTEME SERVANT A POSITIONNER UN FILET DE PECHE
 (54) Title: SYSTEM FOR POSITIONING A FISHING NET



(57) Abrégé/Abstract:

A fishing net is held in place below a corkline by a series of holding devices. Each holding device has a crimped cylinder from which three loops extend. One of these loops may be tied around the corkline to position the crimped cylinder below the corkline. The other two loops co-operate with similar loops from other adjacent holding devices to position the fishing net below the holding devices.

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SYSTEM FOR POSITIONING A FISHING NET

ABSTRACT OF THE DISCLOSURE:

5 A fishing net is held in place below a corkline by a series of holding devices. Each holding device has a crimped cylinder from which three loops extend. One of these loops may be tied around the corkline to position the crimped cylinder below the corkline. The other two loops co-operate with similar loops from other adjacent holding devices to position the fishing net below the holding devices.

SYSTEM FOR POSITIONING A FISHING NET**BACKGROUND OF THE INVENTION:**

The prior art commercial practice for hanging a fishing net from a floating corkline is well stated in lines 10 to 52 of column 1 of U.S. Patent No. 4,763,432 to Barclay granted August 16, 1988 and entitled Fishnet Hanging System.

5 The aforesaid Barclay patent teaches that a hanging cord is threaded through the top selvage of the net or web of the fishnet assembly and is secured at regularly spaced locations to separate anchor blocks which in turn are secured to the fishnet corkline.

Ban U.S. Patent No. 4,644,432 in Figures 4 to 7 discloses the use of interlocking loops to engage successive sections of a net to a cork or handline.

10 Brickman U.S. Patent No. 2,408,367 and Barclay, previously cited, (element 45, Figures 12 to 15) disclose the use of clamps to secure the monoline together.

Phillips U.S. Patent No. 3,213,560 discloses the use of tie strings 22 to secure a net to a leadline.

15 Koetjc U.S. Patent No. 4,693,031 uses connector means 12 for securing a net to a longline.

Cantor *et al* U.S. Patent No. 4,562,660 uses a single long connector line to secure several net sections to a cork or leadline.

Wall U.S. Patent No. 4,517,759 uses a stop means through a leadline to prevent a net securing line from slipping along the leadline.

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SUMMARY OF THE INVENTION:

This invention relates to a system for hanging a fishing net from a corkline.

25 The invention utilizes a plurality of holding devices that are suspended from the corkline. Each holding device has three loops projecting from a sleeve. One loop projects upwardly from the sleeve and is used to hang the sleeve from the corkline. The other two loops project downwardly from the sleeve. The first of these two downwardly projecting loops

is much shorter than the second loop. The second loop is passed through the first loop and also through several openings at the top of the fishing net; the first loop of an adjacent holding device passing through the aforesaid second loop of the first holding device but only after that second loop has passed through the openings in the net.

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BRIEF DESCRIPTION OF THE DRAWINGS:

Figure 1 is a side view of a fishing net 16, 17 held from a corkline 10 by the system comprising the invention;

Figure 2 shows how the holding device 12 is tied to the corkline 10 by loop 13;

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Figure 3 is a side view of the holding device of this invention;

Figure 4 illustrates a cylindrical metal piece which, when crimped, comprises part 12.

Figure 5 is a side view of the cylinder of Figure 4; the loops 13, 14 and 15 being included;

Figure 6 is another form of crimped device 12;

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Figure 7 is another view of the loop 13 holding the crimped piece 12; but with emphasis on bonding material 18 to hold the loop in place on the corkline 10;

Figure 8 is a side view of a machine for making the loops of Figure 3;

Figure 9 is a top view of the device of Figure 8;

Figure 10 is a side view of Figures 8 and 9 with a feed roll added; and

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Figure 11 is a top view of an apparatus for spacing corks on the corkline.

DETAILED DESCRIPTION OF THE INVENTION:

The invention employs a conventional corkline 10 from which net 17 hangs. The net is a web the upper part of which is the conventional selvage 16. For the purpose of this description and the claims the selvage 16 is considered part of the "net".

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The net 17 hangs from the corkline by a series of holding devices 11 as shown in more detail in Figure 3 where there is shown a crimped cylinder 12 having one loop 13 extending in one direction away from crimped cylinder 12; and first and second loops 14 and 15, respectively, extending away from crimped cylinder 12 in another direction.

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The function of the loop 13 is to hold the crimped cylinder 12 below the corkline 10. As shown in Figure 2 the loop 13 is tied around corkline 10 to hold the crimped cylinder 12 in place.

In Figure 1 is shown the corkline 10 with three holding devices such as 11. All three holding devices 11, 11a and 11b are identical; which means that loops 13, 13a and 13b are identical; that loops 14, 14a and 14b are identical; and that loops 15, 15a and 15b are identical.

To illustrate how the holding device 11 is connected to the net 16, 17 it is noted that loop 14 is passed through the free end of loop 15a of holding device 11a. The loop 15 is then passed through loop 14 and then through several openings in the net 16, 17 and is ultimately held in place by loop 14b.

To secure the loops 13, 13a and 13b in place, a bonding agent 18 (Figures 1, 7) is applied to the loops 13, 13a and 13b and to the corkline 10. The preferred bonding agent is a hot glue applied with a brush while at 400°F. A suitable glue is known as Super BondTM sold by Riddling Co., of Texas.

While I have shown only three holding devices 11, it is understood that the usual fishing net would require a great many holding devices spaced along the corkline 10 and the net 16, 17.

The loops 13, 14 and 15 are composed of a mono-filament line such as that known as Hi-Seas Mono FilamentTM, sold by Hi-Seas Industries, Inc., 325 Spring Street, New York, N.Y., U.S.A. 10013. This single filament (mono-filament) line has a diameter of 1.8 millimeters and will rupture when placed under 250 pounds in tension. A single filament plastic cord is preferred for the loops 13, 14 and 15, but the exact make and type described above is not required. That type, however, has "memory" which is very helpful when the holding devices are reused as they tend to correctly position themselves with very little effort on the part of the fisherman who is installing the net.

The crimped cylinder 12 may be made from a metallic cylinder 20 (Figure 4). After the loops 13, 14 and 15 have been added to the cylinder the ends 22 and 23 of the cylinder are crimped as shown in Figure 5. This secures the loops 13, 14 and 15 to the crimped cylinder 12.

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A modified form of crimped cylinder is shown in Figure 6. To make this form of crimped cylinder the cylinder 20 of Figure 4 has the mono-filament loops 13, 14 and 15 inserted in it. It is then crimped to a shape that has an elliptical cross-section wherein the two ends 32 and 33 are smaller than the center 31; see Figure 6.

5 Figures 8 and 9 show apparatus, for use in the field, for making holding devices 11 as shown in Figure 3. The base 80 has three sets of holes 82, 84 and 86, and the crimping device 81. The fact that each set of holes has three holes permits selection of the desired lengths for each of the loops 13, 14 and 15 (Figure 3). With the pins 83, 85 and 87 in the selected holes the three loops 13, 14 and 15 are formed around the pins 83, 85 and 87 respectively. The
10 cylinder 20 (Figure 4) is mounted in the hand operated crimping machine 81 and the loops 13, 14 and 15 are fed through the central opening of the cylinder 20. The crimping machine 81 is then operated to crimp the cylinder 20 and thereby clamp the loops 13, 14 and 15 in the crimped cylinder.

15 Figure 10 shows how the monofilament flexible cord may be fed from reel 90 through the cylinder 20 and around the pins 83, 85 and 87 to form the three loops 13, 14 and 15.

 Figure 11 shows apparatus for spacing the corks on the corkline. Corkline 10 from reel 90 is fed through clamps 91 and 92 which are mounted on base 93. The clamps 91 and 92 enable the corkline to be held firm and the corks to be properly spaced while the net devices are being assembled to it.

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The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A device, which in co-operation with at least one similar device, is capable of (a) being suspended from a horizontal elongated supporting element and (b) at least partially suspending a fishing net, the device comprising:

clamping means in the form of a sleeve with two open ends;

a first loop extending from one of said ends and comprising means for supporting said clamping means from said element;

second and third loops extending away from said other end, one of which second and third loops is longer than the other and comprising means for at least partially suspending said net; and

each of said three loops comprising a cord extending into said sleeve, and said clamping means comprising means for clamping said cords in said sleeve together.

2. A device as defined in claim 1, in which said second and third loops are composed of a material which has memory and comprising means for tending, when reused, to position themselves in the same position they had during their previous use.

3. A device as defined in claim 1, in which each cord is a monofilament line.

4. A process for making a device, which in co-operation with at least one similar device, is capable of (a) being suspended from a horizontal elongated supporting element and (b) at least partially suspending a fishing net, the process comprising:

providing a clamping means in the form of a sleeve with two open ends;

providing a first loop extending from one of said ends and comprising means for supporting said clamping means from said element;

providing second and third loops extending away from said other end one of which second and third loops is longer than the other and comprising means for at least partially suspending said net;

providing each of said three loops with a cord extending into said sleeve; and

compressing said clamping means to clamp said cords together in said sleeve.

FIG. 1

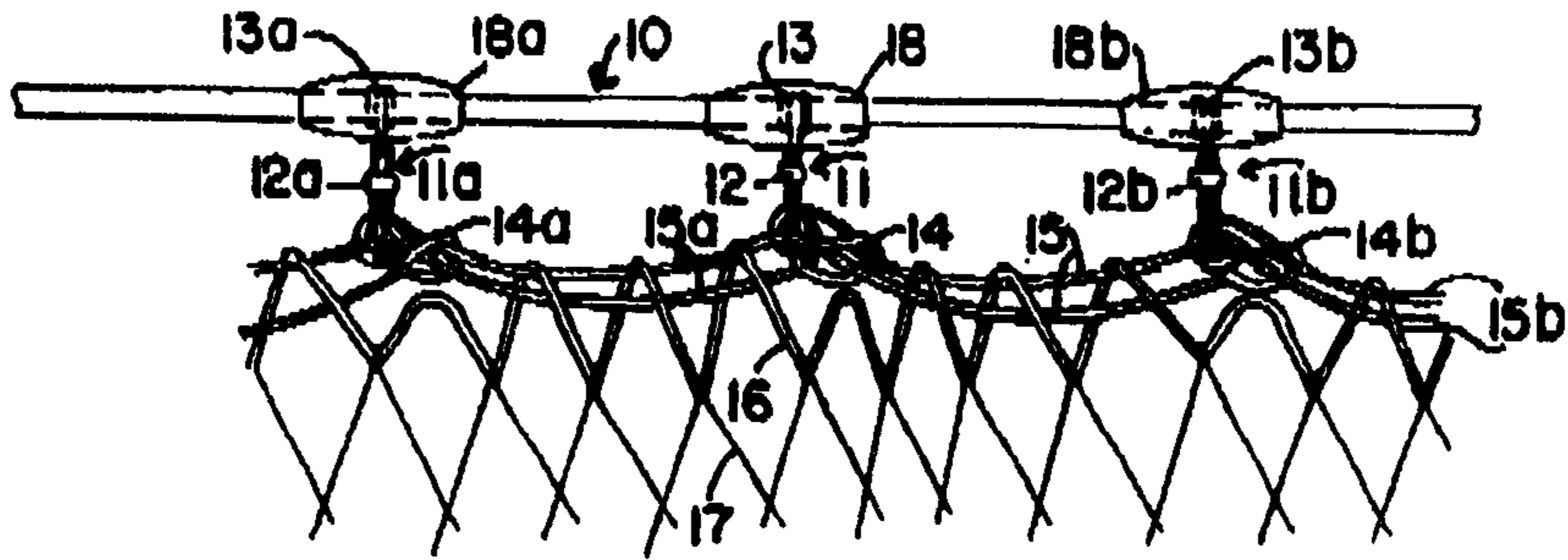


FIG. 2

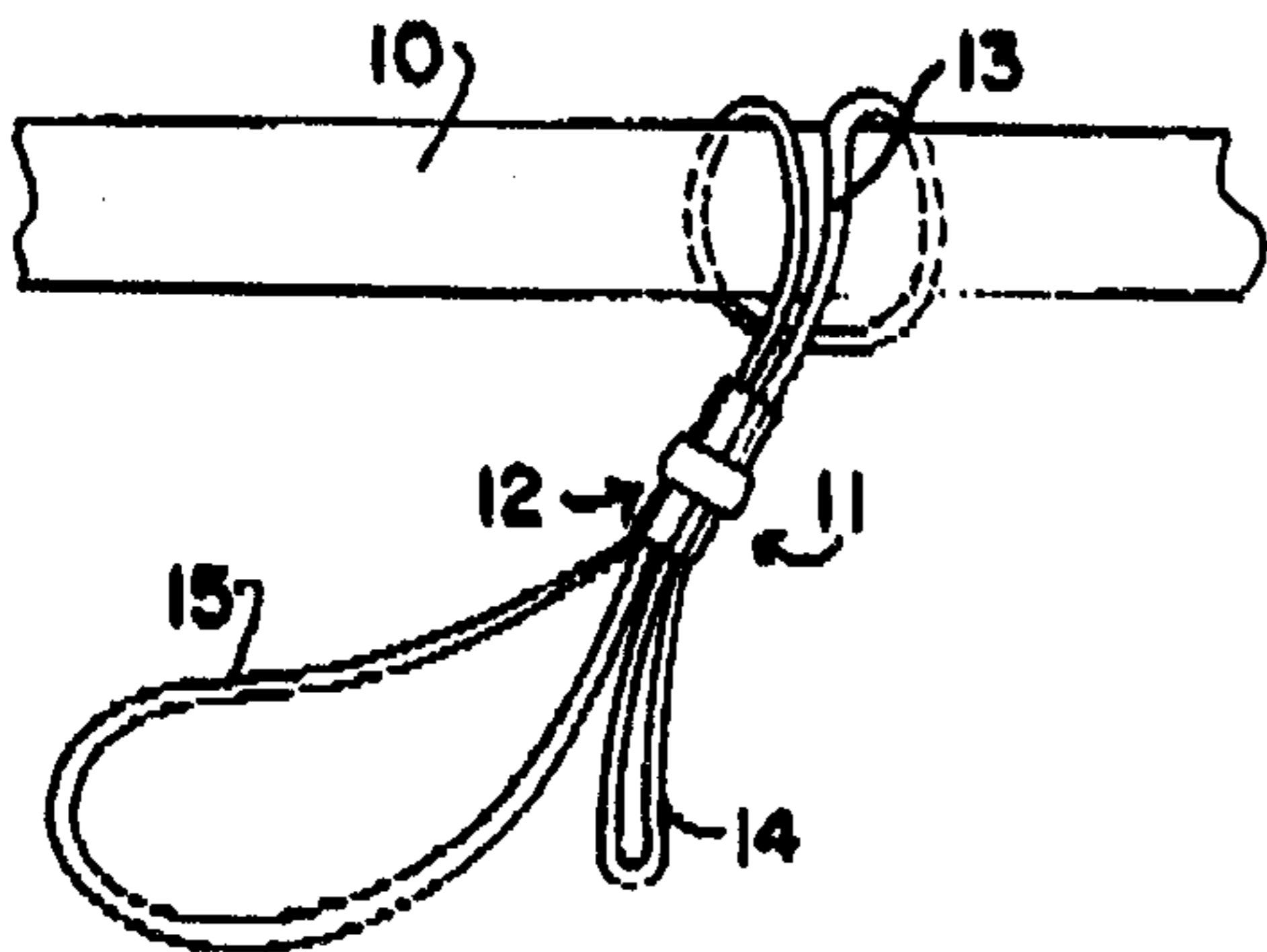


FIG. 4

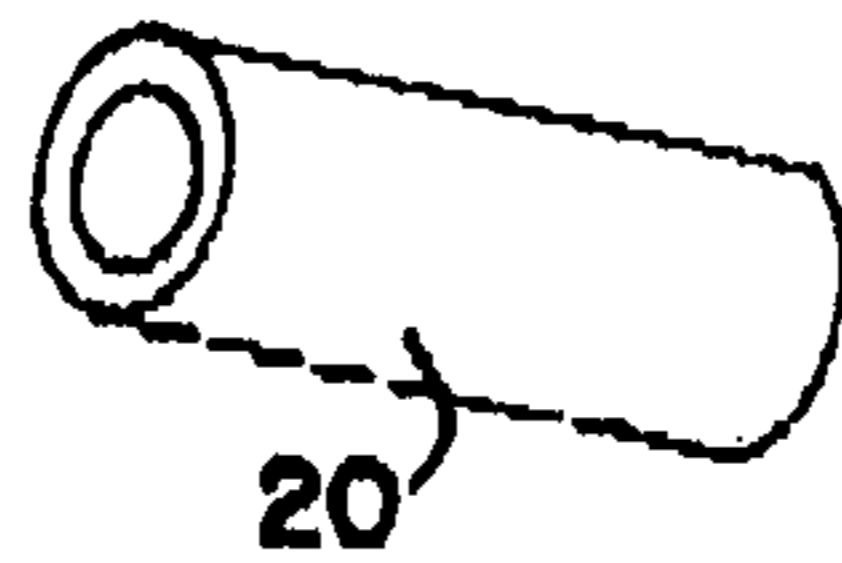


FIG. 3

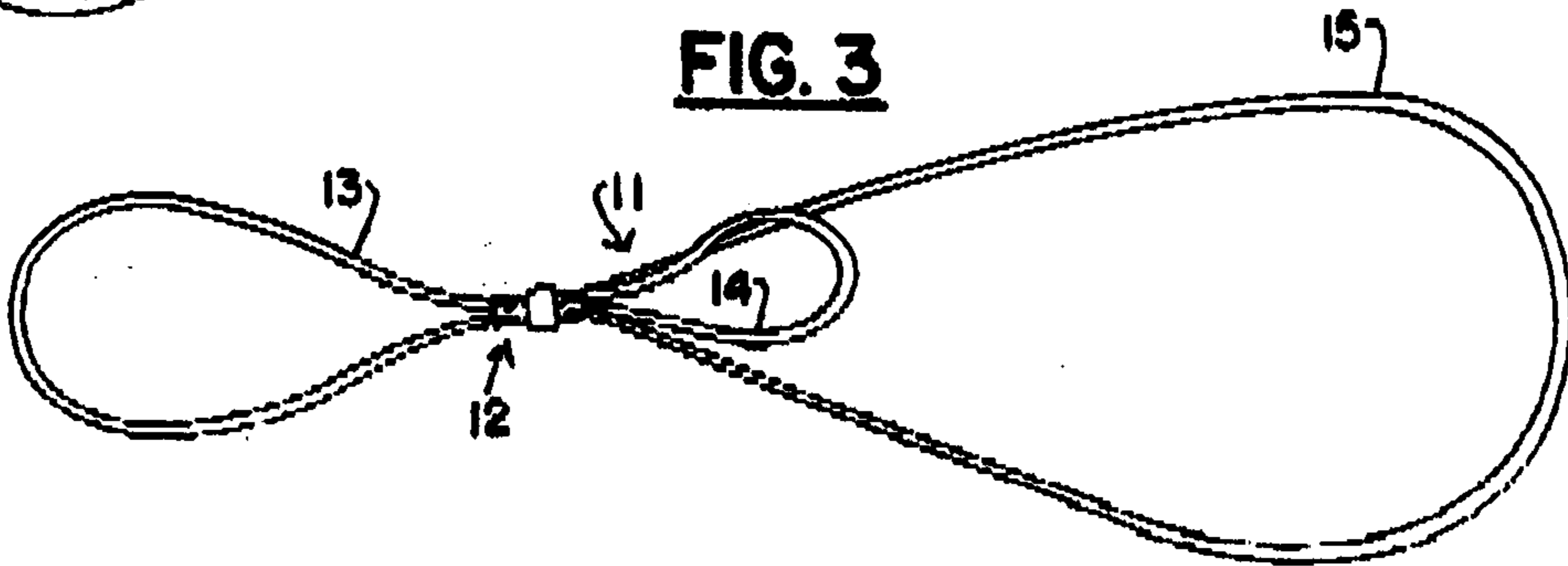


FIG. 5

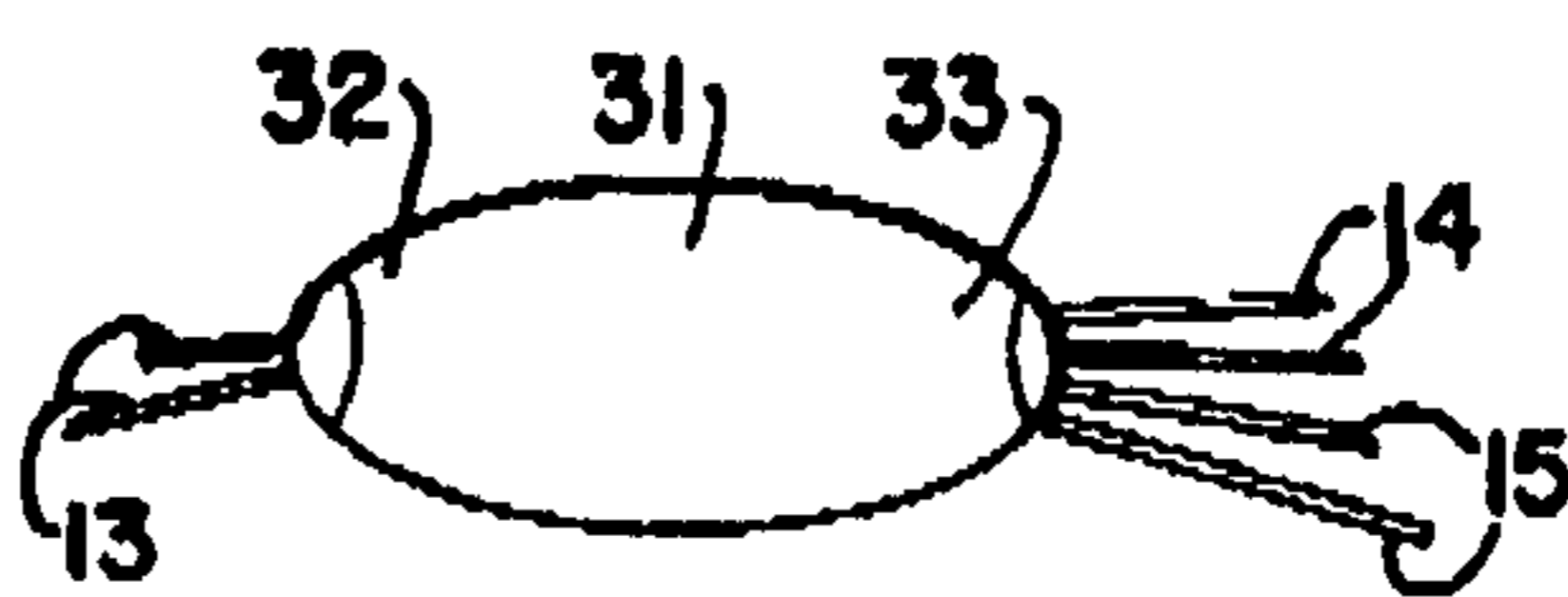
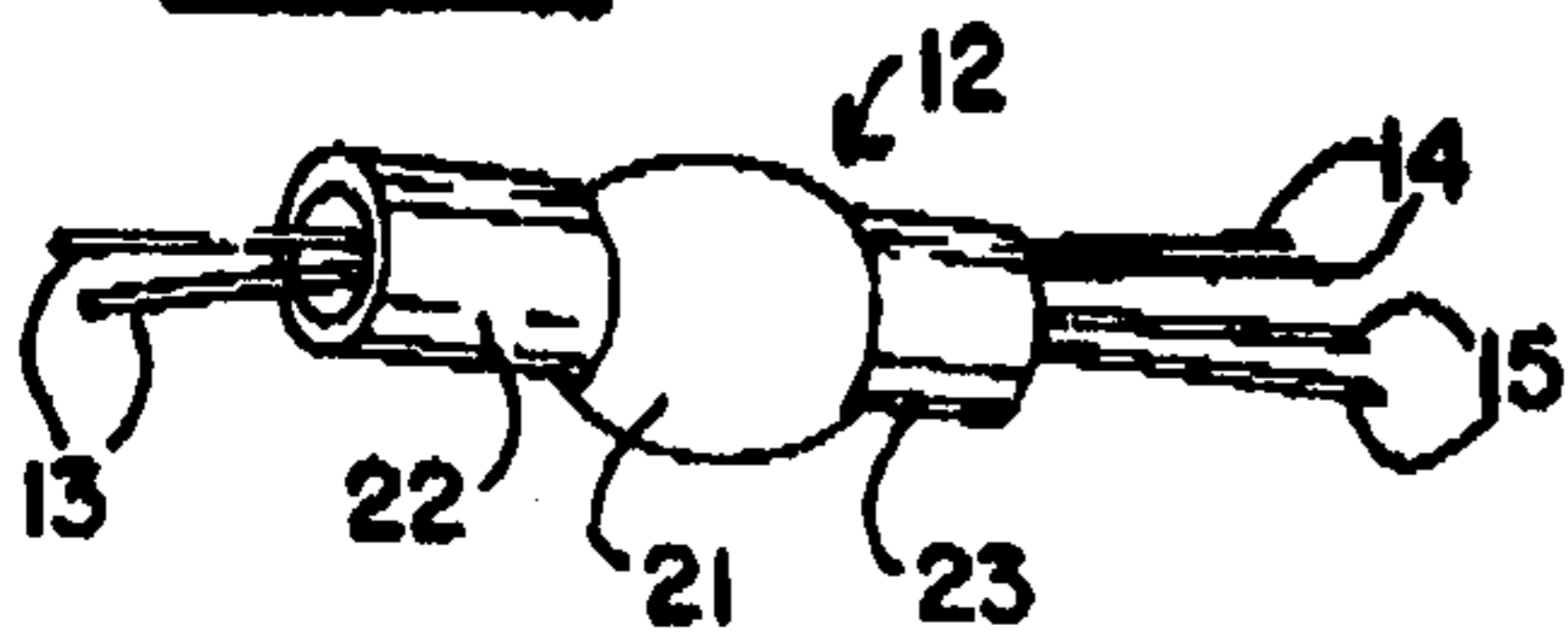


FIG. 6

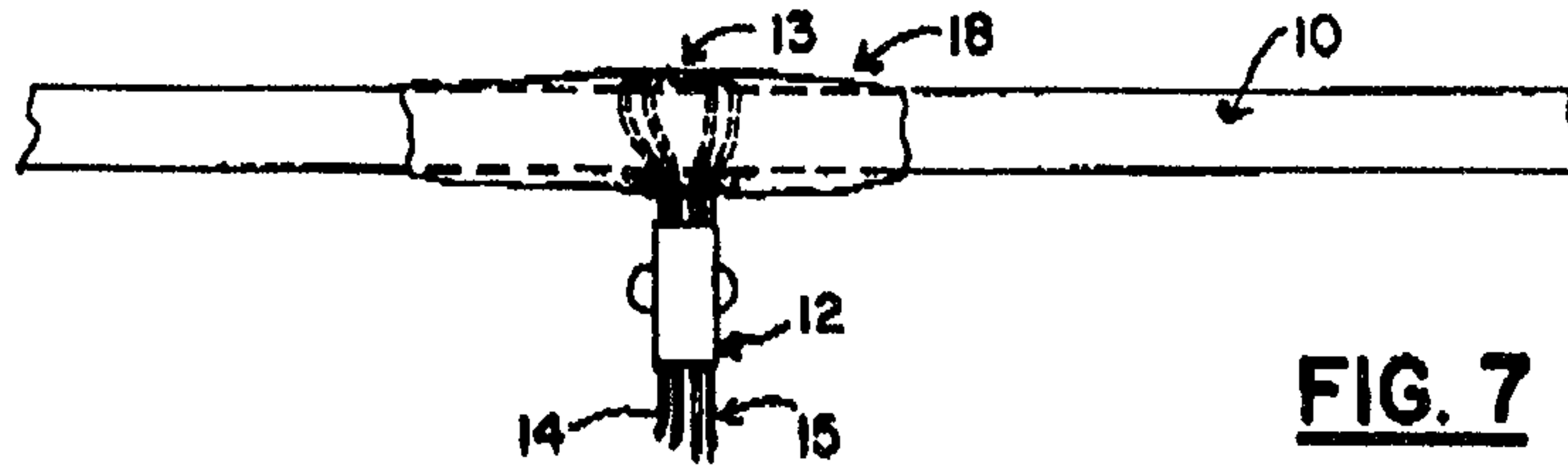


FIG. 7

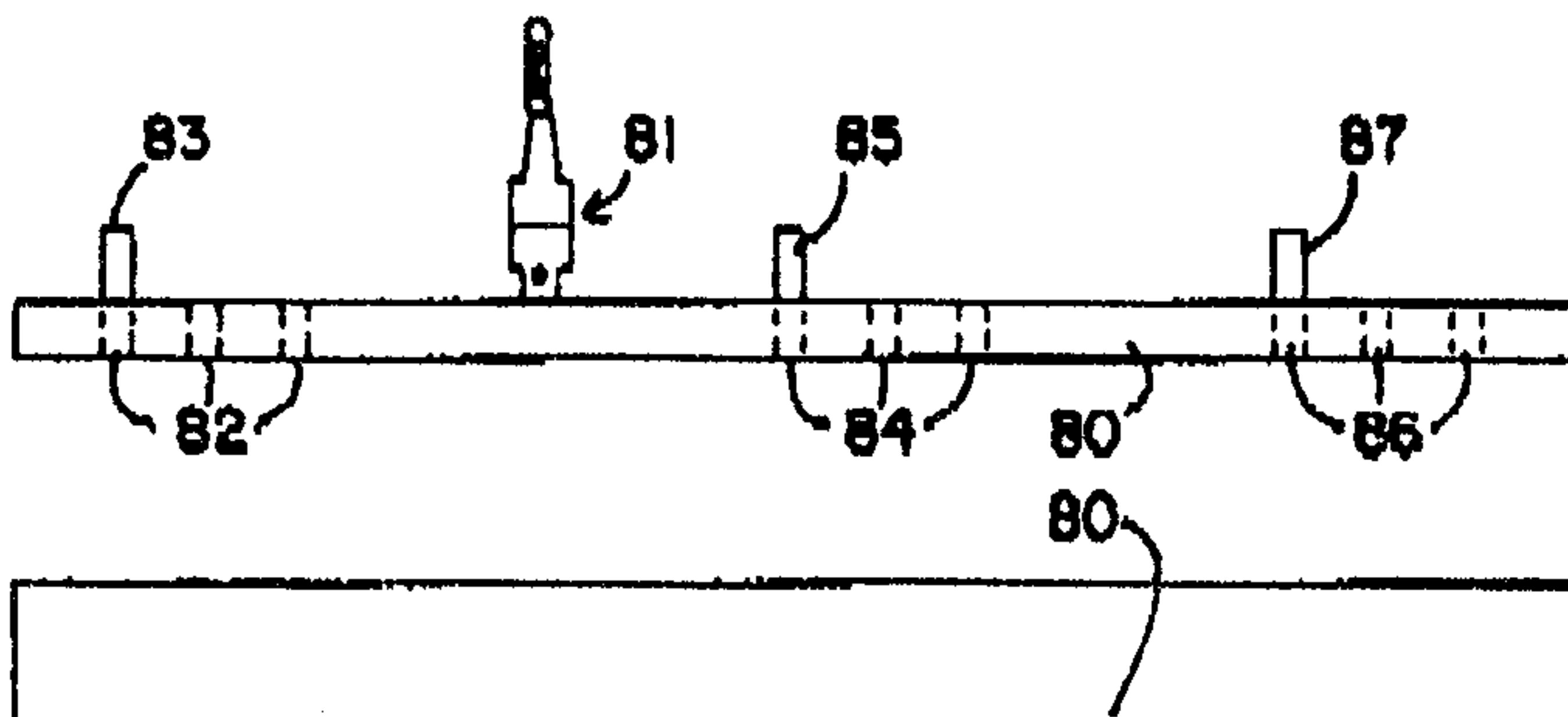


FIG. 8

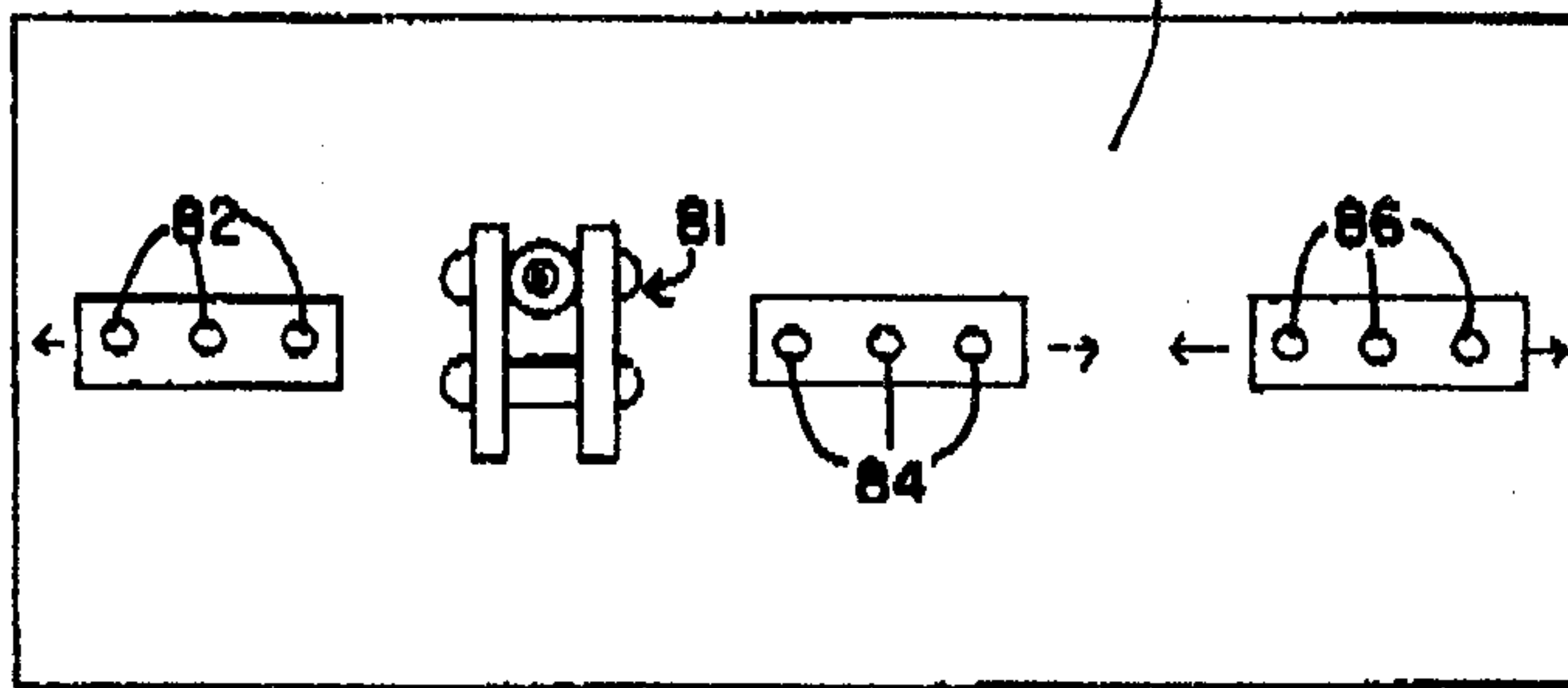


FIG. 9

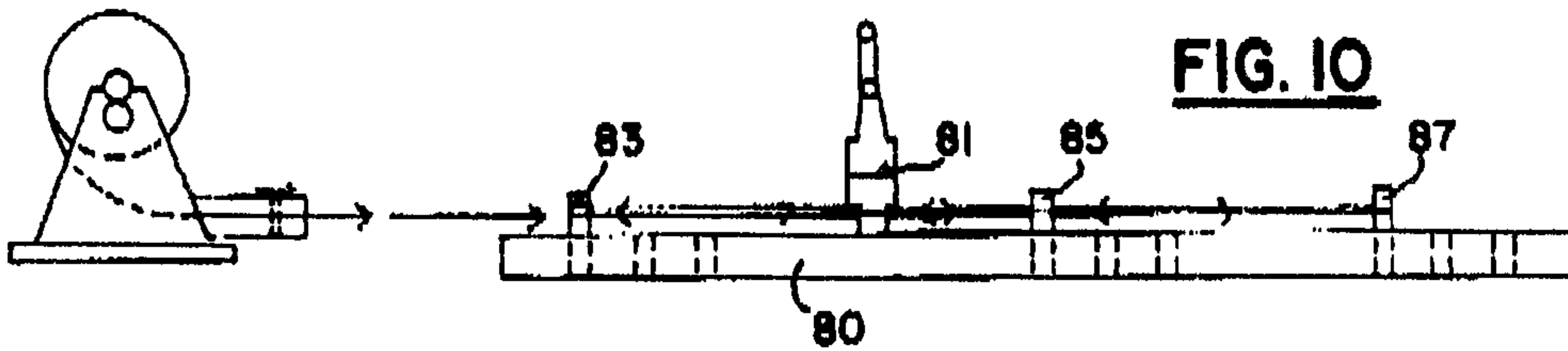


FIG. 10

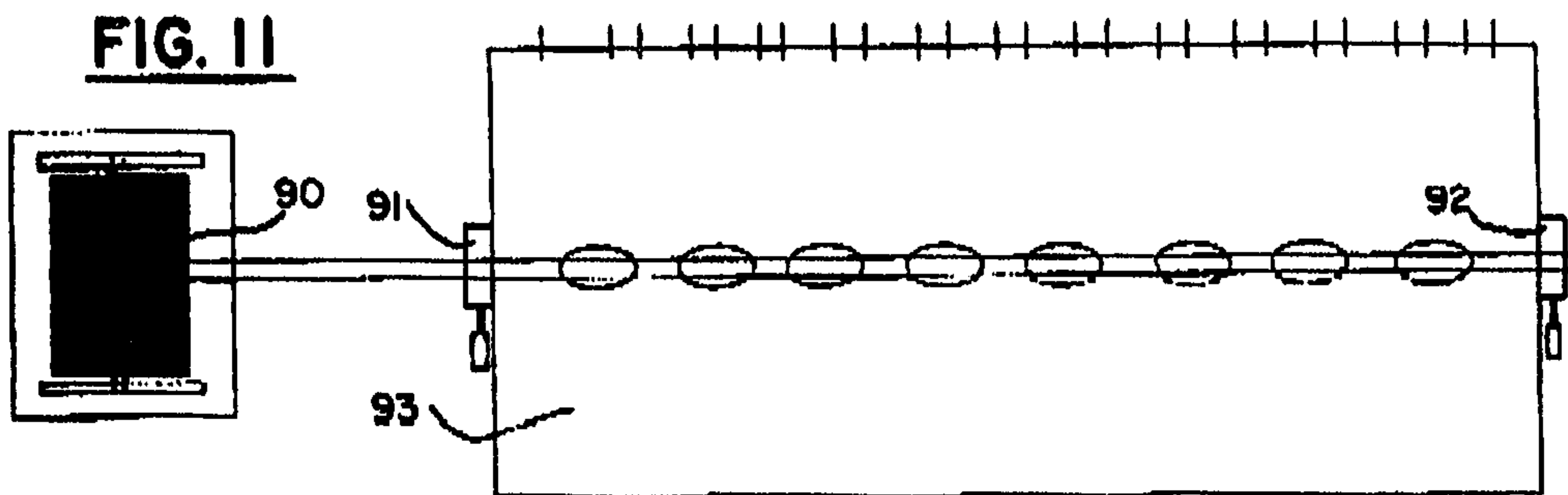


FIG. 11

