(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) Publication number: **0 302 160 A1**

(12) EUROPEAN PATENT APPLICATION

(21) Application number: **87830462.5**

(51) Int. Cl.[4]: **F16G 11/00**

(22) Date of filing: **23.12.87**

(43) Date of publication of application:
08.02.89 Bulletin 89/06

(84) Designated Contracting States:
AT BE CH ES GR LI LU NL SE

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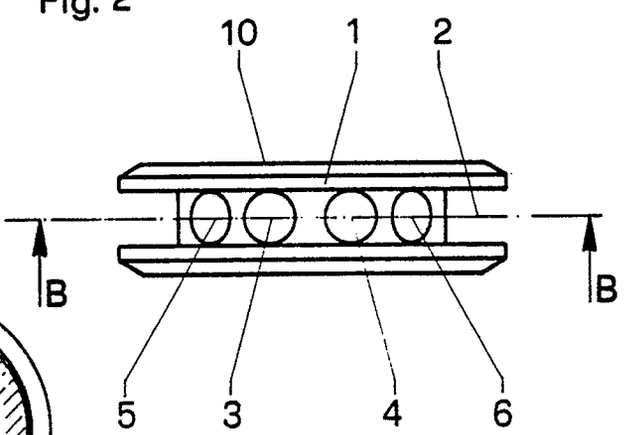
(54) A retaining member for the ends of cords.

(57) A retaining member for engaging both ends (7,8) of a cord (9) such that the cord is looped comprises a rigid body (1) with a groove (2) extending around its perimeter. The ends (7,8) of the cord (9) are each engaged in a respective blind hole (5,6) which extends at an angle of 90 or less to the groove (2). Two bores (3,4) for receiving the cord (9) are also provided and each extend through the body (1). The ends of the cord (9) are retained within the blind holes (5,6) by friction.

Fig. 2



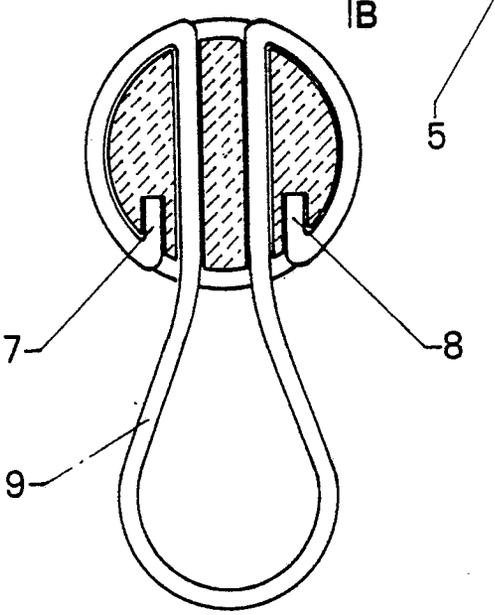


Fig. 5

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A RETAINING MEMBER FOR THE ENDS OF CORDS

The present invention relates to a retaining member for the end or ends of one or more cords.

A retaining member can engage one end of the cord or one end of each of two cords. However, the retaining member is particularly useful when utilised to engage both ends of a single cord. The retaining member with engaged cord can form a key holder, for example. Where the cord is sufficiently substantial, for example is made of rope, tools and other articles provided with hooks, can be hung thereon.

Throughout the specification and claims, the term cord is used to refer to all cords regardless of size, and thus to cover thread, string and rope.

At present if it is required to secure the two ends of a cord on a member to form a keyholder or a tool hanger or the like, this has to be done by using clamps or screws, or by enlarging the ends with knots or weld material. This causes difficulties in the assembly and also entails the use of special equipment for the assembly, and hence an increase in cost.

Other known fixing means tend to decrease the efficiency of the material from which the cord is made, and thus to increase problems due to wear.

According to the present invention there is provided a retaining member for the end or ends of one or more cords, said member comprising a body having a groove extending along its perimeter, a first bore extending through said body, said bore being in communication with said groove, and a first hole extending from said groove into said body, wherein said hole and said groove define an angle therebetween which is less than or equal to 90°.

The invention also provides a retaining member with an engaged cord in which one end of the cord is engaged in said first hole.

The invention will be described hereinafter, by way of examples, with reference to the accompanying drawings, in which:

Fig. 1 shows a plan view of a retaining member of the invention.

Fig. 2 shows a side view of the member of Fig. 1.

Fig. 3 shows a cross section of the retaining member taken on the line A-A of Fig. 1.

Fig. 4 shows a cross section of the retaining member taken on the line B-B of Fig. 2.

Fig. 5 shows a cord engaged in a retaining member of the present invention.

Figures 1 to 4 show a retaining member comprising a flat, rigid, cylindrical body 1 having a groove 2 extending completely around its circular perimeter. Two bore 3 and 4 extend through the body 1, and two blind holes 5 and 6 extend into the body 1 from the groove 2. Each end of each bore 3 and 4 opens into the groove 2. In the embodiment illustrated, the two bores 3 and 4 and the two blind holes 5 and 6 all extend substantially in the same plane and in parallel to one another.

In the illustrated embodiment, the two ends of a cord 9 are engaged in the retaining member such that the cord defines a loop. In this respect, the first end of the cord 9 is inserted within the blind hole 5 and the other end 8 of the cord 9 is inserted within the blind hole 6 as can be seen in Fig. 5. Each blind hole 5,6 extends with respect to the groove 2 at an angle less than or equal to 90°. This angle ensures sufficient friction between the cord 9 and the holes 5,6 to maintain the ends of the cord 9 engaged within the respective holes 5 and 6.

It will be appreciated that the manner in which the cord is threaded in the retaining member as shown in Fig. 5 is arranged such that the application of force to the loop of the cord 9 tends to increase the friction between the cord and the holes 5,6.

In the embodiment illustrated, the cord 9 is formed of polyvinyl chloride whose resilient characteristics aid in retaining each end of the cord 9 in the respective hole 5,6 even when the cord 9 is not stretched.

The embodiment illustrated and described above is given only by way of example, and variations and modifications can be made thereto. For example, the body 1 can have a suction cup fitted on its planar surface 10. This suction cup can be used to affix the retaining member on a wall to enable the cord 9 to support tools or other articles provided with hooks. Alternative fixing means to replace the suction cup could be a magnet or adhesive means. The shape of the body 1 can be choosen as required. For example, the body could be substantially in the shape of a plate and/or it could have a rectangular or square perimeter. In one embodiment, the body is made of plastics material, but it could also be made of other materials as appropriate.

Claims

1. **A retaining member for the ends of one or more cords,** characterized by the fact that said member comprises a body having a groove extending along its perimeter, a first bore extending through said body, said bore being in communication with said groove, and a first hole extending

from said groove into said body; said hole and said groove defining an angle therebetween which is less than or equal to 90°.

2. **A retaining member** as claimed in Claim 1, characterized by the fact that said first bore and said first hole extend substantially in the same plane and are substantially parallel.

3. **A retaining member** as claimed in any preceding claim, characterized by the fact that said groove extends completely around the perimeter of said body.

4. **A retaining member** as claimed in any preceding claim, characterized by the fact that said body is substantially cylindrical.

5. **A retaining member** as claimed in any preceding claim, further comprising a second bore extending through said body, said second bore being in communication with said groove, and a second hole ext ending from said groove into said body characterized by the fact that said second hole and said groove define an angle therebetween which is less than or equal to 90°.

6. **A retaining member** as claimed in claim 5,characterized by the fact that said first and second bores and said first and second holes all extend substantially in the same plane and are substantially parallel.

7. **A retaining member** with an engaged cord as claimed in any of claims 5 or 6,characterized by the fact that one end of said cord is engaged in said first hole.

8. **A retaining member** with an engaged cord as claimed in any of claims 5 or 6, characterized by the fact that one end of said cord is engaged in said first hole and the other end of said cord is engaged in said second hole such that said cord forms a loop.

9. **A retaining member** with an engaged cord as claimed in claim 8 characterized by the fact that is is arranged as a keyholder.

10. **A retaining member** with an engaged cord as claimed in claim 8, characterized by the fact that is is arranged as a tool holder wherein said body carries fixing means.

Fig. 1

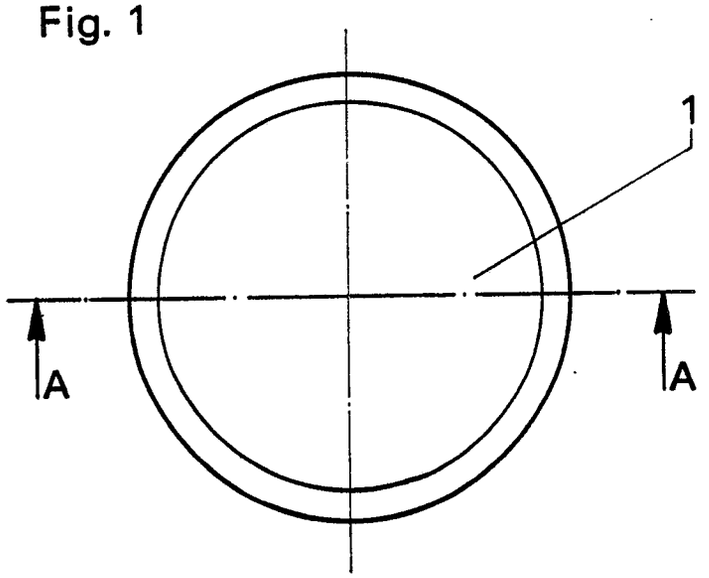


Fig. 3

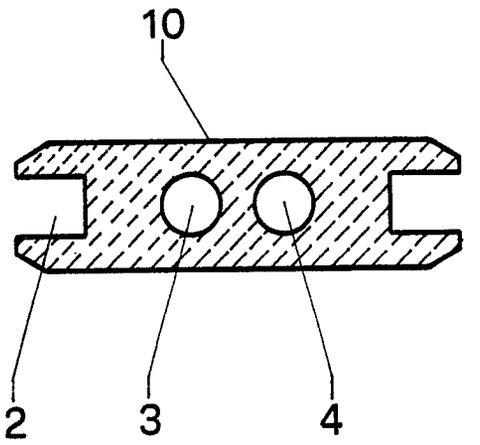


Fig. 2

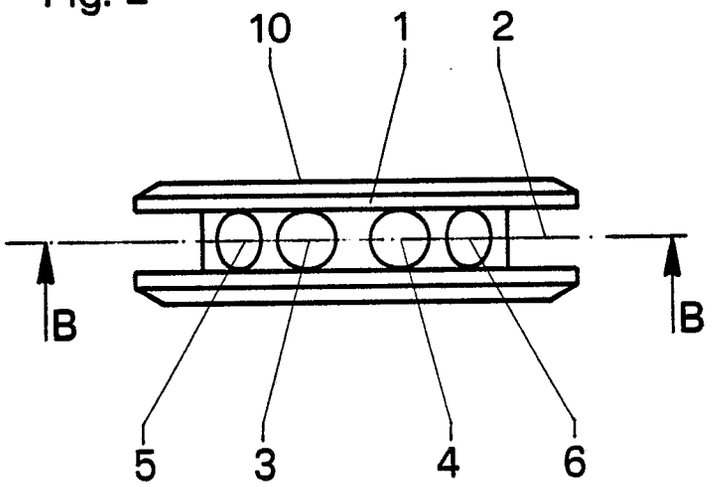


Fig. 4

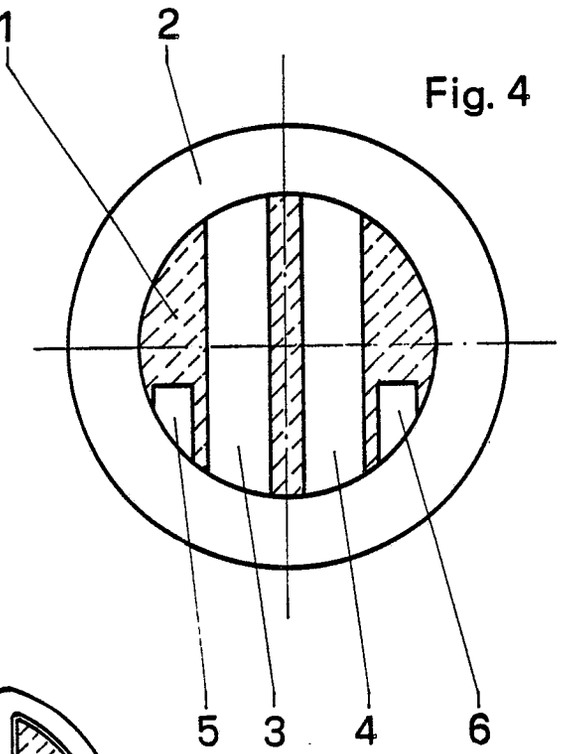
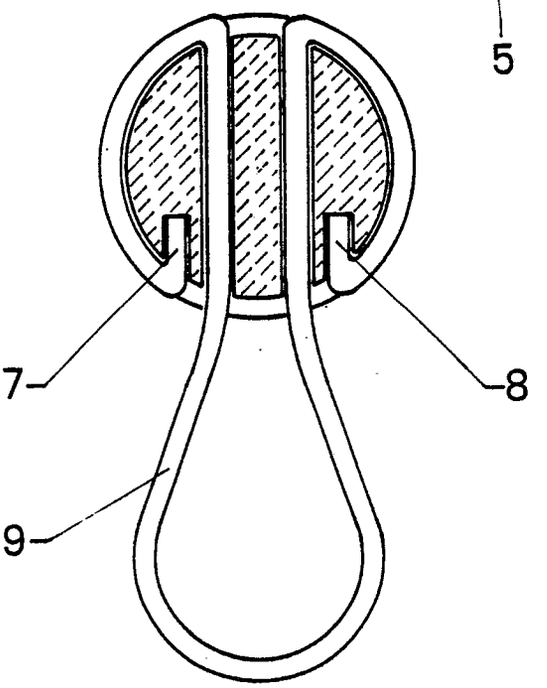


Fig. 5



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EUROPEAN SEARCH REPORT

Application Number

EP 87 83 0462

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
X	DE-U-8 705 277 (AIRAGHI) * Whole document * -----	1-10	F 16 G 11/00

TECHNICAL FIELDS SEARCHED (Int. Cl.4)

F 16 G
A 44 B
A 43 C

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	05-08-1988	BARON C.

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
O : non-written disclosure
P : intermediate document

T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons

& : member of the same patent family, corresponding document

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