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(54) **ACCESSORY FOR INSTALLING, POSITIONING AND FIXING A TELESCOPIC SIGHT ON A SPORTING RIFLE**

ZUSATZTEIL ZUR INSTALLION, POSITIONIERUNG UND BEFESTIGUNG EINES
ZIELFERNROHRS AN EINEM SPORTGEWEHR

ACCESSOIRE D'INSTALLATION, DE POSITIONNEMENT ET DE FIXATION D'UN GUIDON
TÉLESCOPIQUE DANS UNE CARABINE DE SPORT

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Description

[0001] The present invention relates to an accessory for the installation, positioning and clamping of a scope in an air rifle according to the preamble of claim 1.

BACKGROUND OF THE INVENTION

[0002] It is known in the state of the art the existence of the scopes installed and fitted on the air rifles that allow to the user to be able to use and to make use of the optical features of the scope, in order to improve the conditions of laying in the use of the rifle.

[0003] Answering to such possibility, the air rifles are on many occasions adapted for the incorporation and installation of the mentioned scopes.

[0004] Thus, in some cases, like in US 5 531 039 which forms a starting point for the preamble of claim 1, the rifles have some longitudinal slots in its upper part, so that the guides of the scope fit in them, allowing the movement and positioning of the scope and its fitting in the body of the rifle by the same user.

[0005] In other cases, like in US 4 026 055 A, the rifles have some orifices with threads, made in order that an accessory, where the scope remains fixed, is screwed directly to the body of the rifle.

[0006] In the first case, as well as in the second case, the vibrations and shakes caused by the successive shots and the consequent recoils of the rifle, mean that the scope loses its corresponding adjustment that supposes a lost in the features of the scope for the improvement of the laying of the rifle.

[0007] Another of the problems that are known are referred to the fact that it is necessary to manufacture two models of rifles, a model with the before indicated longitudinal slots and the other one with some orifices for the screwed of the accessory to the body of the rifle.

BRIEF DESCRIPTION OF THE PATENT OF INVENTION

[0008] The above problems are solved by an accessory having the features of the characterizing part of independent claim 1.

[0009] The present invention is a considerable advance in the installation and fixing of the scopes on the air rifles.

[0010] Thus, it allows by the user the adjustment and exact positioning of the scope for its correct adjustment in the rifle, and thus to make use of the optical features of the scope, using for that purpose the slots placed on the upper part of the rifle and the same accessory, in an easy and effective way,

[0011] At the same time, it allows a perfect clamping, fixation and lock together of the scope and of the accessory in the body of the rifle, without no danger of mismatching in its adjustment caused by the vibrations and shakes caused by the shots, what it means that there is

no lost in the features that the scope offers for the improvement of the laying.

[0012] Besides this type of accessory allows the manufacture of a single model of rifle, as for those that prefer fixing the scope directly on the rifle, as for those that prefer fixing it on an accessory (as it is the object of the present invention). That is so since as the accessory uses the slots in the rifle, it is eliminated the version of manufacture in which, in order to fix the scope to the rifle, the rifle was perforated to fix this scope in the rifle through screws.

BRIEF DESCRIPTION OF THE DRAWINGS

[0013] With the purpose to facilitate the explanation five sheets of drawings are attached to the present description, in which a practical case of an embodiment has been reproduced, which is mentioned only for exemplificative, non limitative of the scope of the present invention:

- Figure 1 is a view of the support constitutive of the accessory of the invention.
- Figure 2 is a view of the support constitutive of the accessory of the invention, fitted and positioned on the upper part of an air rifle.
- Figure 3 is a section cut of the figure 2 by the line III-III.
- Figure 4 is a final sight of the scope installed on the air rifle through the accessory of the invention.
- Figure 5 is an increased section cut of the figure 4, by the line V-V.

PREFERRED EMBODIMENT OF THE PATENT

[0014] Thus, it is shown in figure 1 the accessory 1 and its longitudinal axis 1', the guides 3 of the accessory 1, the longitudinal cavity 5 of the accessory 1, and the opening passages 6 and orifices 7 of the accessory 1.

[0015] In the figure 2 it is illustrated the accessory 1 and its longitudinal axis 1', the upper part of the rifle 2, the guides 3 of the accessory 1, the slots 4 of the rifle 2, the longitudinal cavity 5 of the accessory 1, and the opening passages 6 and orifices 7 of the accessory 1 with its respective screws 6' and 7' or similar.

[0016] In the figure 3 it is represented the accessory 1, the upper part of the rifle 2, the guides 3 of the accessory 1, the slots 4 of the rifle 2, the longitudinal cavity 5 of the accessory 1, the opening passage 6 of the accessory 1 with its respective screw 6', and the scope 8.

[0017] In the figure 4 it has been drawn the accessory 1, the upper part of the rifle 2, the guides 3 of the accessory 1, the slots 4 of the rifle 2, the longitudinal cavity 5 of the accessory 1, the opening passages 6 and the screws 6' and 7' of the accessory 1, and the scope 8.

[0018] In the figure 5 it is shown the accessory 1, the upper part of the rifle 2 with its hole 2', the longitudinal cavity 5 of the accessory 1, the screws 6', the orifice 7 of the accessory 1 with its respective screw 7', and the

scope 8.

[0019] The accessory of the present invention allows, for one side, to carry the scope, and for another side, and simultaneously, to be incorporated, positioned and clamped in the same air rifle, being therefore the scope installed in the rifle.

[0020] In a preferred embodiment, and as it can be appreciated in the figure 1, the accessory for the installation and clamping of a scope in an air rifle is formed by an accessory 1 of long and flat constitutive typology, and formed to adapt to the upper part of the body of the air rifle 2.

[0021] To allow its coupling and installation in the air rifle 2, the accessory 1 includes some guides 3 throughout its longitudinal dimension, and in the side that it gets in contact with the same air rifle 2.

[0022] The mentioned guides 3 are adapted to the slots 4 of the air rifle 2, configured to such effect, allowing the accessory 1 to be able to be placed on the air rifle 2 and to be able to slide longitudinally over the air rifle by the action of the user until its desired position, as it can be seen in the figure 2.

[0023] The accessory 1 has a longitudinal cavity 5 and some transversal opening passages 6, which appear in more in detail in the figure 3. The opening passages 6 cross perpendicularly to its longitudinal axis 1' the accessory 1 from one side to the other side, and crossing the cavity 5. Said opening passages 6 have also a threaded interior surface, so that some screws can be introduced in them 6', as it can be seen in detail in the figure 3.

[0024] When the screws 6' are screwed in the opening passages 6, they cross also the cavity 5, crossing transversally, therefore, the accessory 1.

[0025] When keeping tightening them, the accessory 1 compresses and transitorially flex in respect to its own longitudinal axis 1' and the cavity 5, according to the arrows of the figure 3, tightening therefore the guides 3 on the slots 4 of the air rifle 2 in which they are adapted, like a staple. So it is obtained to position, to fix and to immobilize the accessory 1 in its correct place on the air rifle 2.

[0026] Moreover, the accessory 1 has an orifice 7, a centering device, detailed in the figure 4. This orifice 7 goes across the accessory 1 in a perpendicular direction to the transversal opening passages 6, and also has a thread in its inner part, being able a centering screw 7' to be screwed on it.

[0027] This screw 7 when being screwed on crosses the accessory 1, and is screwed on also in another hole 2' with thread, placed in the upper part of the same air rifle 2. In this way, the accessory 1 is centered the air rifle 2.

[0028] The accessory 1 is ready to carry the scope 8, in such a way that this last one can remain finally positioned and installed in the air rifle 2 through the accessory of the invention, and as it is represented in the figures 4 and 5,

[0029] Thanks to the accessory of the invention, the scope remains perfectly installed and centered in the air

rifle. The specific fixation of the accessory in the air rifle and its intermediate arrangement between the scope and the same air rifle, allows the scope not to lose its adjustment as a consequence of the vibrations and shakes of the successive shots of the air rifle, and therefore to keep its optical features for the improvement of the conditions of laying of the air rifle by the user.

[0030] Even though the use of screws 6' 7' has been mentioned, the present invention comprises too those other similar means of fixation that accomplish with the same purposes, as some pins or nails, etc.

[0031] The present application describes an accessory for the installation, positioning and clamping of a scope in an air rifle. The examples mentioned here are not limitatives of the present invention, for that reason it will be able to have different applications and/or be adapted, all of them within the scope of the following claims.

Claims

1. Accessory for the installation, positioning and clamping of a scope on an air rifle (2), said rifle (2) comprising on its upper side a series of longitudinal slots (4), facing said accessory (1), said accessory (1) being of the type formed by a longitudinal support with means for fixing a scope (8) on its upper part, the mentioned accessory (1) comprising:

- on its lower part longitudinal guides (3) partially engaging the rifle (2) and adapted to fit in the slots (4) of the same air rifle (2),
- a longitudinal cavity (5) throughout its longitudinal dimension, and
- a plurality of opening passages (6) that cross the accessory (1) from one side to the other perpendicularly to its longitudinal axis (1') crossing said cavity (5), said opening passages (6) being suitable to house screws (6') or similar means of fixation, in such a way that when the screws (6') are introduced in the opening passages (6) they compress and transitorially flex the accessory (1) about its own longitudinal axis (1') and cavity (5), causing the guides (3) to be pressed in the slots (4) of the rifle (2) like a clamp, fixing and immobilizing the accessory (1) in its position on the rifle (2),

said accessory (1) being **characterized in that** it comprises a centering orifice (7) that crosses the accessory (1) perpendicular to the longitudinal axis (1') of the accessory (1) and perpendicular to the opening passages (6), for the housing of a screw (7') or similar, centering device, which can cross the accessory (1) and can be introduced at the same time in a hole (2') foreseen in the body of the rifle (2).

Patentansprüche

1. Zubehörteil zum Einbau, Positionieren und Festklemmen eines Zielfernrohrs auf einem Luftgewehr (2), wobei das Gewehr (2) an der Oberseite eine Reihe länglicher Schlitze (4) aufweist, die dem Zubehörteil (1) gegenüber liegen, wobei das Zubehörteil (1) aus einem Längsträger mit Mitteln zur Befestigung eines Zielfernrohrs (8) an der Oberseite besteht, wobei das genannte Zubehörteil (1):

- an der Unterseite Längsführungen (3), die teilweise mit dem Gewehr (2) in Eingriff stehen und in die Schlitze (4) desselben Luftgewehrs (2) passen,
- über die gesamte Längsausdehnung einen Längshohlraum (5) sowie
- mehrere Öffnungsdurchgänge (6) aufweist, die das Zubehörteil (1) von einer zur anderen Seite senkrecht zu dessen Längsachse (1') durchqueren und dabei den Hohlraum (5) durchqueren, wobei die Öffnungsdurchgänge (6) Schrauben (6') oder ähnliche Befestigungsmittel so aufnehmen können, dass bei Einführung der Schrauben (6') in die Öffnungsdurchgänge (6) diese das Zubehörteil (1) komprimieren und vorübergehend um dessen eigene Längsachse (1') und Hohlraum (5) biegen, wodurch die Führungen (3) klemmenartig in die Schlitze (4) des Gewehrs (2) gepresst werden und **dadurch** das Zubehörteil (1) in seiner Lage am Gewehr (2) befestigen und verankern,

wobei das Zubehörteil (1) **dadurch gekennzeichnet ist, dass** es eine Zentrieröffnung (7) aufweist, die zur Aufnahme einer Schraube (7') oder einer ähnlichen Zentriervorrichtung, die das Zubehörteil (1) durchqueren und gleichzeitig in eine im Gewehrkörper (2) vorgesehene Bohrung eingeführt werden kann, das Zubehörteil (1) senkrecht zur Längsachse (1') des Zubehörteils (1) und senkrecht zu den Öffnungsdurchgängen (6) durchquert.

Revendications

1. Accessoire pour le montage, le positionnement et la fixation d'une lunette sur une carabine à air comprimé (2), ladite carabine (2) comprenant, sur la partie supérieure, une série de rainures longitudinales (4), situées en face de l'accessoire (1), ledit accessoire (1) étant du type qui se compose d'un support longitudinal avec un moyen permettant de fixer une lunette (8) sur la partie supérieure, ledit accessoire (1) comprenant :
- des guides longitudinaux (3) sur la partie inférieure, enclenchant partiellement la carabine (2)

et conçus de façon à venir se loger dans les rainures (4) de ladite carabine à air (2),

- une cavité longitudinale (5) sur toute la longueur, et
- une pluralité d'ouvertures de passage (6) qui traversent perpendiculairement l'accessoire (1) d'un côté à l'autre sur l'axe longitudinal (1') traversant ladite cavité (5), lesdites ouvertures de passage (6) permettant de loger des vis (6') ou un moyen de fixation similaire, de telle manière que, lorsque les vis (6') sont introduites dans les ouvertures de passage (6), elles puissent comprimer et faire transitoirement fléchir l'accessoire (1) sur son propre axe longitudinal (1') et la cavité (5), obtenant ainsi que les guides (3) soient poussés dans les rainures (4) de la carabine (2) agissant comme un système d'attache, fixant et immobilisant l'accessoire (1) dans sa position sur la carabine (2),

ledit accessoire (1) étant **caractérisé en ce qu'il** comprend un orifice de centrage (7) qui traverse l'accessoire (1) perpendiculairement à l'axe longitudinal (1') de l'accessoire (1) et perpendiculairement aux ouvertures de passage (6), permettant de loger une vis (7') ou un dispositif de centrage similaire qui peut traverser l'accessoire (1) et qui peut être introduit en même temps dans un trou (2') prévu à cet effet dans le corps de la carabine (2).

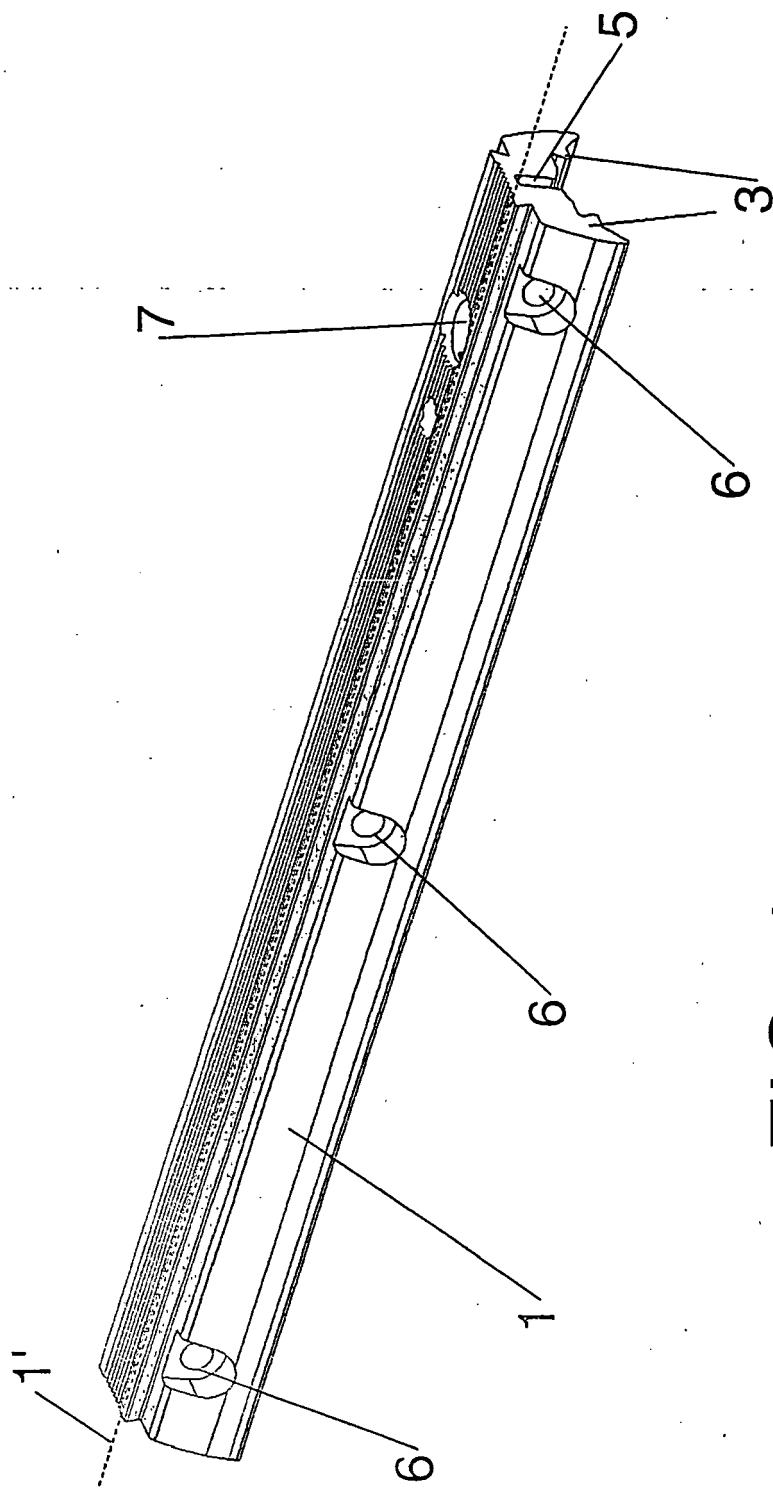


FIG. 1

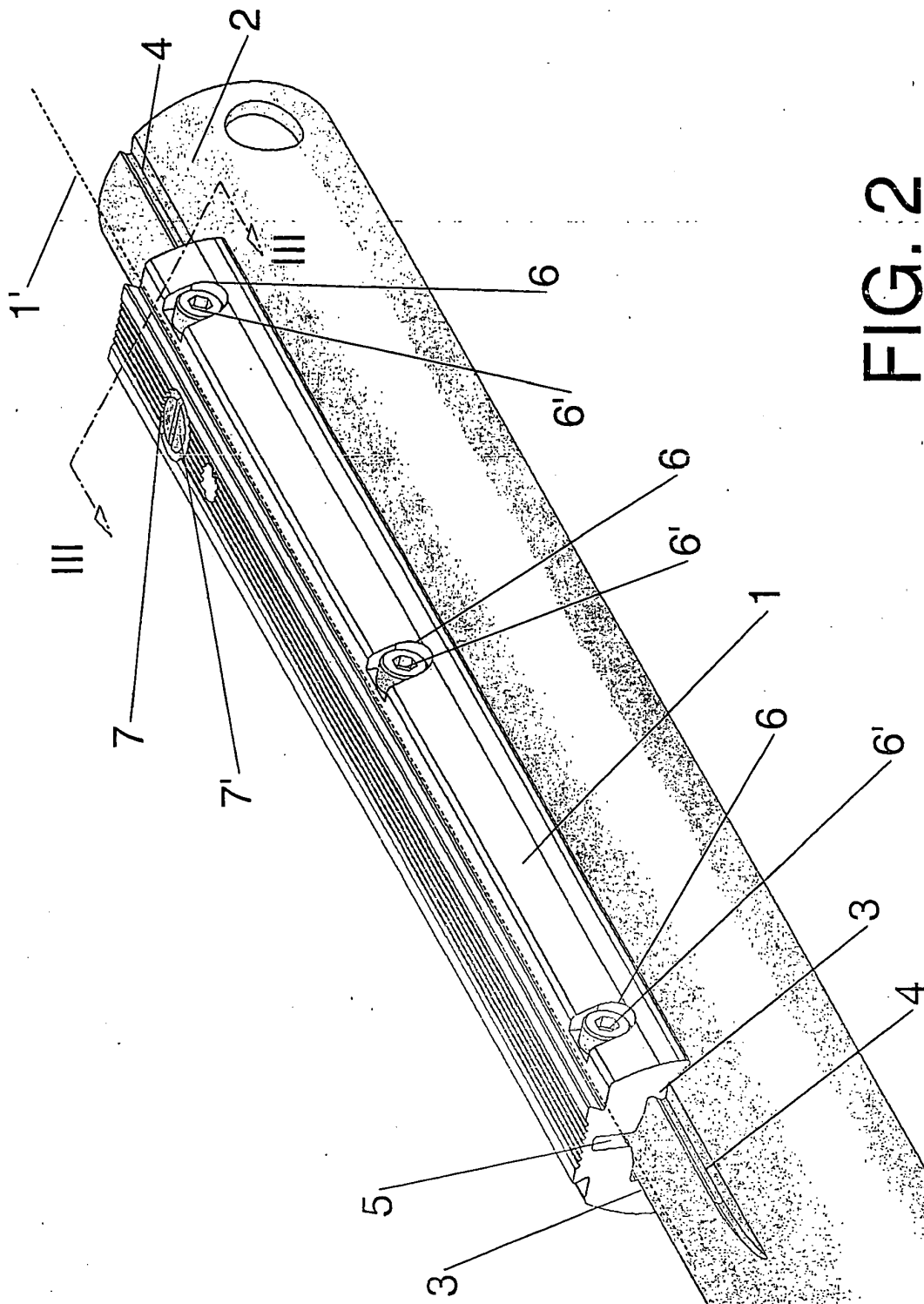
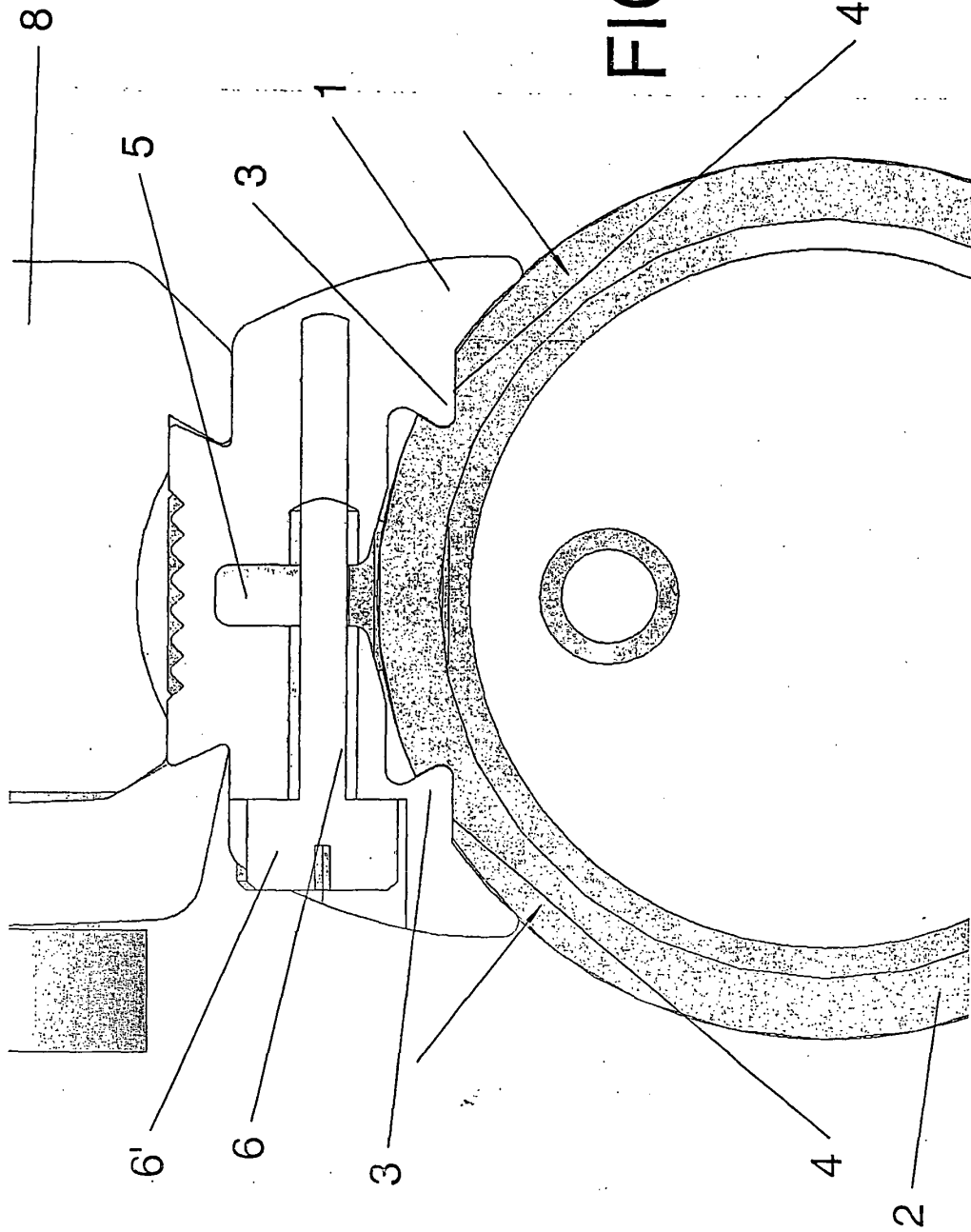
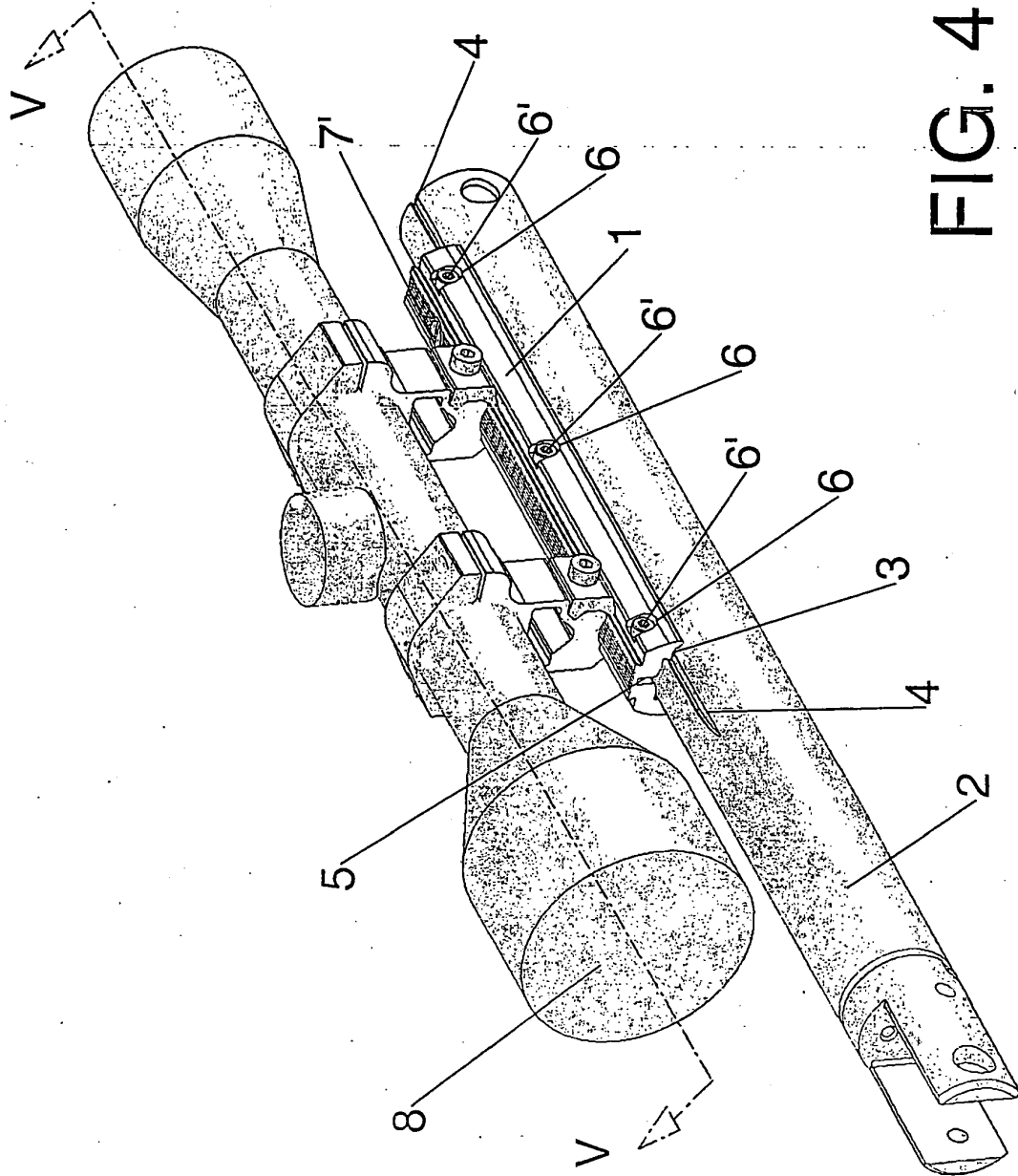


FIG. 2





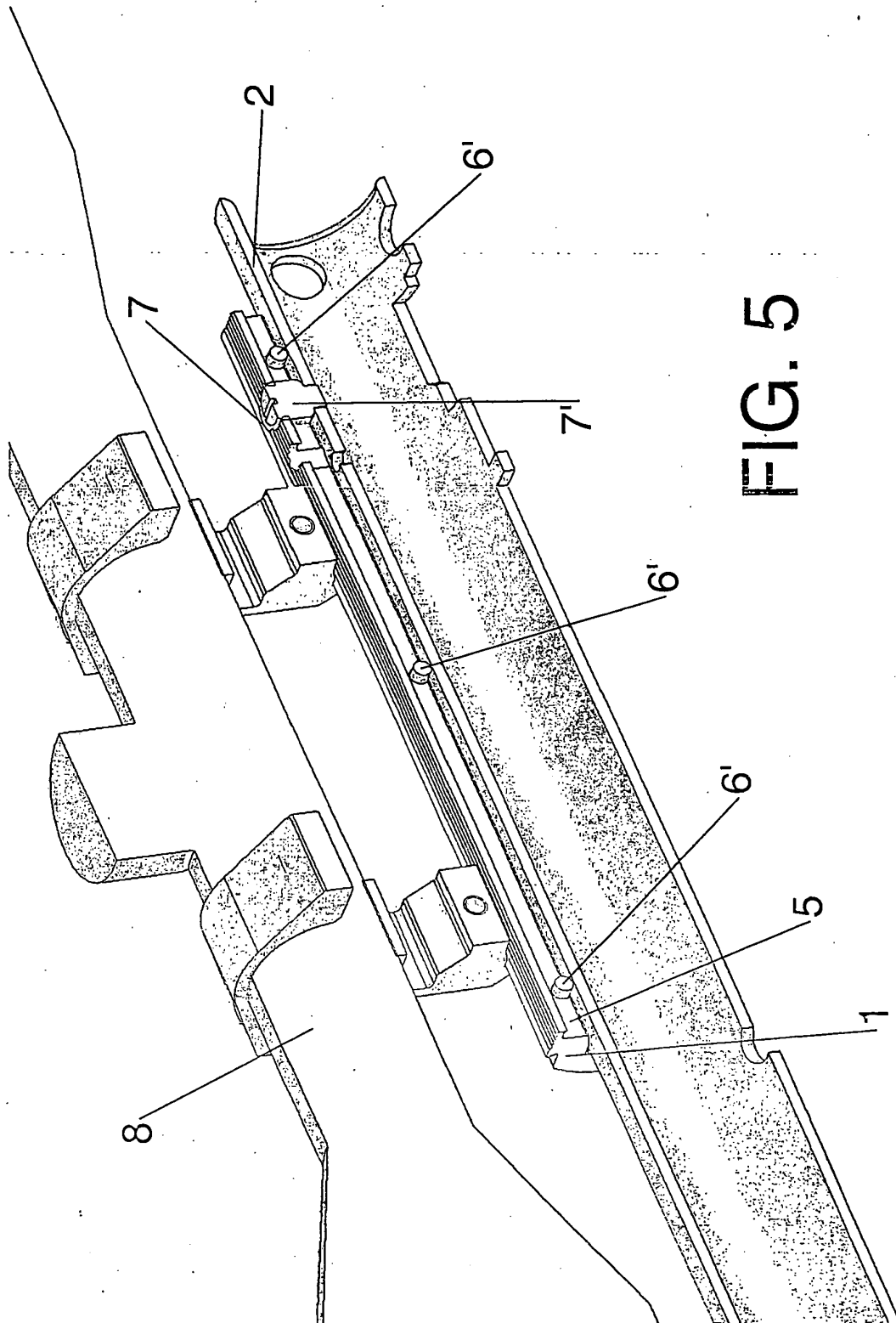


FIG. 5

REFERENCES CITED IN THE DESCRIPTION

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