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(54) **IMPROVED ADJUSTABLE FIREARM BUTT AND A FIREARM COMPRISING SAID ADJUSTABLE BUTT**

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Description

[0001] The present invention regards an improved butt for a firearm, preferably for a gun, with greater capacity to adapt to the morphological and holding characteristics of the user of the aforementioned firearm.

[0002] The invention also regards a firearm, preferably a gun, comprising the aforementioned butt.

[0003] It is known that firearms, such as pistols and guns, exploit the kinetic energy of the gases expanding from a propelling or bursting charge to fire projectiles. However, this dynamic causes an adverse effect known in the field as "recoil". The expression recoil is used to indicate the backward movement by the firearm upon firing.

[0004] More precisely, the movement referred to as recoil comprises two combined effects, the actual recoil, i.e. the equal and opposite force the firearm is subjected to with respect to the projectile, and the so-called "soaring" which instead consists in the rotational effect the firearm is subjected to with respect to the support surface.

[0005] Disadvantageously, the occurrence of both effects upon firing a projectile causes a variation of the motion of the projectile thus leading to the detriment of the firing accuracy of the firearm. Such negative effect is more marked in guns, due to the fact that the recoil and, above all, the soaring force is greater than in pistols. It is thus clear that the aforementioned lower accuracy represents a major drawback especially when using firearms, guns in particular, in circumstances and events where, indeed, maximum firing accuracy is required, for example in skeet shooting.

[0006] Thus, with the aim of overcoming such drawback at least partly, there is known the application - at the rear part of a firearm, a gun in particular - of a so-called "butt", i.e. an extended element which allows placing the firearm on the shoulder of the user so as to absorb the recoil and soaring force and thus reducing the risk of varying the motion of the projectile with respect to the ideal trajectory.

[0007] Butts usually comprise a main support structure made of a single piece and suitable to be fixed to the rear end of the barrel and to the firing mechanism of the firearm.

[0008] In addition, a so-called "butt plate", i.e. an element made of a deformable material, usually rubber, is possibly associated to the rear end of such main support structure, especially in sports, with the aim of further absorbing the recoil generated by the firearm before such force is transferred to the shoulder. However, disadvantageously, providing a butt statically connected to a firearm and whose components are in turn statically associated to each other, does not allow obtaining an efficient and quick adaptation of the butt and, generally, the firearm to the different morphological and holding characteristics of the different users.

[0009] In other words, it is commonly known that each butt of a firearm, a gun in particular, is made by hand as

a single piece by the expert hands of artisans, so as to adapt it to the specific need of a single user.

[0010] Thus, it is clear that disadvantageously a butt thus made and the relative firearm on which it is applied cannot be used by several users with different morphological and holding characteristics.

[0011] In addition, it is clear that providing and manually adapting a butt to a specific user implies considerable costs.

[0012] Document US1384386 A describes a butt for firearm comprising a main support structure adapted to be integrally associated to the barrel and the firing mechanism of the firearm, a butt plate adapted to absorb the recoil generated by said firearm and means for coupling the main support structure to the butt plate in such a way to allowing the variation of the position of said butt plate with respect to said main support structure along the direction defined by the longitudinal development axis of said butt.

[0013] The aim of the present invention is to overcome all the aforementioned drawbacks.

[0014] In particular, one of the objects of the invention is to provide a universal type of firearm butt, i.e. capable of being adapted to the morphological and holding characteristics of any user of such firearm.

[0015] Another object of the invention is to provide a firearm butt capable to allow implementing such adaptations in a quick and simple manner.

[0016] In addition, another object of the invention is to provide a firearm butt capable of modifying the mutual positions of the components thereof an unlimited number of times so as to be able to adapt the firearm to the morphological and holding characteristics of different users at different times.

[0017] The aforementioned objects are attained by providing a firearm butt according to independent claim 1.

[0018] In particular, the firearm butt subject of the invention comprises adjustable coupling means used for associating the main support structure to the butt plate so as to allow varying the position of the butt plate with respect to the aforementioned main support structure at least along the direction defined by the longitudinal development axis of the butt.

[0019] In addition, even though - contrary to the known butts - they provide for an adjustable association between the main support structure and the butt plate, the aforementioned coupling means with the particular characteristics according to independent claim 1 are advantageously easy to manufacture thus entailing much lower production costs with respect to the costs required for hand-made butts and for adapting a butt of the prior art.

[0020] In addition, such manufacturing simplicity of the butt subject of the invention and the relative coupling means advantageously allows limiting the degree of wear out of the various components they are made of. Furthermore, such manufacturing simplicity of the butt of the invention and the relative coupling means avoids the occurrence of clearance between the components they are

made of.

[0021] Lastly, as described more in detail hereinafter, the distinctive characteristics of the butt of the invention according to independent claim 1 allow increasing the degree of adjustment of the mutual position of the components thereof.

[0022] Thus, the butt of the invention advantageously offers a greater capacity to adapt to the morphological and holding characteristics of the single user. Further characteristics of the butt of the invention are outlined in the dependent claims.

[0023] The aforementioned objects, together with the advantages that will be mentioned hereinafter, shall be outlined in the description of a preferred embodiment of the invention, provided solely by way of non-limiting example, with reference to the attached drawings, wherein:

- fig. 1 represents a lateral view of the firearm butt subject of the invention;
- fig. 2 represents an exploded lateral view of the firearm butt of the invention;
- fig. 3 represents an axonometric view of the firearm butt of the invention;
- fig. 4 represents an exploded axonometric view of the firearm butt of the invention;
- fig. 5 represents a sectional lateral view of the firearm butt of the invention;
- fig. 6 represents a lateral view of a skeet shotgun comprising the butt of the invention.

[0024] The firearm butt of the invention is represented in figs. 1 to 5 where it is indicated in its entirety with **1**. In fig. 6 the butt **1** of the invention is represented associated to a firearm **100**, in particular a skeet shotgun **101**.

[0025] In detail, the butt **1** of the invention, as observable in fig. 2, comprises a main support structure **2** suitable to be integrally associated to the barrel **102** and to the firing mechanism **103** of such firearm **100**. In addition, the butt **1** comprises a butt plate **3** suitable to absorb the recoil generated by the firearm **100** upon firing. The connection between the butt plate **3** and the main support structure **2** of the butt **1** of the invention is obtained by coupling means **4**.

[0026] According to the invention, such coupling means **4** are of the adjustable type so as to allow varying the position of the butt plate **3** with respect to the aforementioned main support structure **2** along the direction defined by the longitudinal development axis of the butt **1**, indicated with arrow **X** in fig. 1. Thus, such position adjustment along the aforementioned direction **X** allows adjusting the position of the butt plate **3** with respect to the main support structure **2** according to the morphological and holding characteristics of the user of the firearm **100**.

[0027] According to the preferred embodiment of the invention, as observable in figs. 2 and 4, the coupling means **4** comprise a male tubular element **5** associated to the butt plate **3** and a body **6** in which there is provided

a female housing **7** with a substantially longitudinal development. Such body **6**, as observable in fig. 2, is preferably associated to the main support structure **2**. As observable in fig. 4 and in the section of fig. 5, the aforementioned female housing **7** is provided with an inlet opening **71** which allows the slidable insertion of the male tubular element **5** into the female housing **7**. In addition, such female housing **7**, on the opposite side of the aforementioned inlet opening **71**, has a bottom **72**, visible in fig. 5, defining the maximum limit of insertion of the aforementioned male tubular element **5** into the female housing **7**.

[0028] In addition, preferably but not necessarily, along the female housing **7** it is provided at least a bushing **8** so as to facilitate the sliding of the male tubular element **5** and simultaneously avoid the occurrence of clearances between the male tubular element **5** and the female housing **7**. According to the preferred embodiment of the invention, such bushing **8** is made of polytetrafluoroethylene, commonly referred to as Teflon.

[0029] According to a variant embodiment of the butt **1** of the invention, the male tubular element **5** could be associated to the main support structure **2**, while the body **6**, in which the aforementioned female housing **7** is defined, could be associated to the butt plate **3**.

[0030] The particular embodiment of the coupling means **4** described above advantageously allows quick and simple adjustment of the position of the butt plate **3** with respect to the main support structure **2** of the butt **1**.

[0031] In addition, still advantageously, the slidable coupling of the male tubular element **5** inside the female housing **7** allows obtaining a continuous adjustment of the aforementioned distance between the butt plate **3** and the main support structure **2** of the butt **1**, thus allowing an accurate adjustment. Upon identifying the most suitable position of the butt plate **3** with respect to the main support structure **2** of the butt **1** according to the morphological characteristics of the specific user, such adjustment has to be made stable so as to avert any inadvertent variation. To this end, according to the preferred embodiment of the butt **1** of the invention the body **6** comprises a slit **9** extending from the inlet opening **71** of the female housing **7** according to a direction substantially parallel to the development axis of the female housing **7**, as represented in fig. 4. In addition, the body **6** comprises reversible compression means **10**, configured to approach the walls **9a** and **9b** of the aforementioned slit **9** and, thus, for approaching the walls of the female housing **7** in a direction substantially orthogonal to the development axes of the slit **9** and of the female housing **7**. Thus, the aforementioned compression operation causes the reduction of the internal volume of the female housing **7**, in which the male tubular element **5** is previously inserted and positioned. Should the bushing **8** be inserted in proximity of the inlet opening **71** of the female housing **7** and the slit **9**, it should also be provided with a slit **81** so as to confer an open ring-like shape to the bushing **8**. Thus, when the compression means **10** are

actuated to compress the female housing 7, also the faced walls 81a and 81b of the slit of such bushing 8 will be approached to each other.

[0032] Thus, such volume reduction of the female housing 7 requires shifting from a slidable type of coupling to an interference coupling between the female housing 7 and the male tubular element 5. In other words, upon acting on the aforementioned compression means 10, the male tubular element 5 and, thus, the butt plate 3 take a static position with respect to the body 6 and, therefore, the main support structure 2. As mentioned previously, such static situation is of the reversible type, i.e. acting on the compression means 10 so that they no longer press the walls of the slit 9 and the female housing 7 against each other, allows returning to the slidable coupling condition between the male tubular element 5 and the female housing 7. This allows varying the mutual position between the male tubular element 5 and the female housing 7 once again.

[0033] Preferably, such compression means 10, as represented in fig. 4, comprise a bolt system 11, in particular a screw 11a, arranged passing through a hole 12 defined on the body 6, transverse to the slit 9. The threaded nut 11b of the aforementioned bolt system 11 is preferably obtained integrally joined to the body 6, at one end 12b of the aforementioned hole 12. Alternatively, such threaded nut 11b could be provided separately with respect to the body 6 and coupled to the screw 11a at the end 12b of the hole 12 opposite to the end 12a in which the screw 11a is inserted.

[0034] Furthermore, according to alternative embodiments of the invention, such compression means 10 could be obtained differently with respect to the description above, as long as they can exert a compression pressure on the walls 9a and 9b of the aforementioned slit 9 and, thus, on those of the female housing 7, so as to statically reversibly couple the butt plate 3 to the main support structure 2 of the butt 1 of the invention.

[0035] Furthermore, according to the preferred embodiment of the invention represented in fig. 4, the transverse sections of the male tubular element 5 and the female housing 7 are circularly shaped.

[0036] Advantageously, the latter characteristic not only allows the possibility to adjust the mutual position of the butt plate 3 and the main support structure 2 along the aforementioned direction X, but it also allows mutually rotating the aforementioned two elements, as indicated with arrow Y in fig. 3. In other words, such further relative rotary movement adds a further degree of freedom to the possibility of adapting the butt 1 of the invention to the morphological and holding characteristics of the user of the firearm.

[0037] However, it cannot be excluded that according to different embodiments of the invention the cross sections of the male tubular element 5 and the female housing 7 be differently shaped with respect to the circular shape. Therefore, the rotation of the butt plate 3 with respect to the main support structure 2 is not allowed in

these cases.

[0038] The body 6 according to the butt 1 of the invention, comprises a through hole 13 defined at the bottom 72 according to a development direction substantially parallel to the development axis of the female housing 7, as observable in the section of fig. 5. Such through hole 13 is configured to receive a micrometric screw 14 in turn suitable to be manoeuvred along the female housing 7 so as to define an adjustable end stop element, so as to limit the movement of the male tubular element 5 within the female housing 7.

[0039] The presence of such micrometric screw 14 alongside the type of slidable coupling between the male tubular element 5 and the female housing 7 allows, as mentioned previously, continuously varying the distance between the butt plate 3 and the main support structure 2 and defining the travel of such male tubular element 5 accurately. Thus, the adjustment of the mutual position of the aforementioned two elements may be carried out extremely accurately. Furthermore, the butt 1 of the invention, preferably but not necessarily, foresees that the butt plate 3 be associated to the coupling means 4, in particular to the male tubular element 5, by means of an adjustment unit 15 configured to allow varying the inclination of the butt plate 3 with respect to the main support structure 2, as indicated with arrow Z in fig. 1. Once again, such additional characteristic allows further increasing the degree of adjustment freedom of the butt 1 of the invention according to the morphological characteristics of the specific user.

[0040] Lastly, as observable in figs. 1 and 3, the butt 1 of the invention further comprises a cheek piece 16 connected to the main support structure 2 through second coupling means 17 of the adjustable type, so as to allow varying the position of the cheek piece 16 with respect to the aforementioned main support structure 2. Advantageously, such characteristic allows attaining a further degree of adjustment freedom of the butt 1 of the invention, thus increasing the capacity of the butt 1 to adapt to the morphological and holding characteristics of the user of the firearm 100 also in this case.

[0041] However, it cannot be excluded that, according to different embodiments of the butt 1 of the invention, the cheek piece 16 be not present or integrally connected to the aforementioned main support structure 2.

[0042] As mentioned previously, the firearm 100, preferably a gun 101, comprising a barrel 102, a firing mechanism 103 and a butt 1 having the characteristics of the preferred embodiment or of the alternative embodiments described above, is also part of the invention. In particular, as observable in fig. 6, such gun 101 is preferably a skeet shotgun.

[0043] Thus, in the light of the above, the improved firearm butt of the invention attains all preset objects.

[0044] In particular, the object of providing a universal type of firearm butt, i.e. capable of being adapted to the morphological and holding characteristics of any user of such firearm, is attained.

[0045] Another attained object of the invention is to provide a firearm butt capable allowing implementing such adaptations in a quick and simple manner.

[0046] Lastly, the object of providing a firearm butt capable of modifying the mutual positions of the components thereof an unlimited number of times so as to be able to adapt the firearm to the morphological and holding characteristics of different users at different times is also attained.

[0047] The advantages of providing a butt that is simple to manufacture, with low production costs, limited degree of wear out and low probability of occurrence of clearances between the components it is made of, are also attained.

[0048] Lastly, the advantage of increasing the degree of adjustment of the mutual position of the various components of the butt with respect to the butts of the prior art is also attained.

[0049] Thus, the advantage of improving the capacity to adapt to the morphological characteristics of the single person is also attained.

Claims

1. Butt (1) for a firearm (100, 101) comprising:

- a main support structure (2) adapted to be integrally associated to the barrel (102) and the firing mechanism (103) of said firearm (100, 101);
- a butt plate (3) adapted to absorb the recoil generated by said firearm (100, 101);
- means (4) for coupling said main support structure (2) to said butt plate (3), said coupling means (4) being of the adjustable type and capable of allowing the variation of the position of said butt plate (3) with respect to said main support structure (2) along the direction defined by the longitudinal development axis of said butt (1), said coupling means (4) comprising a male tubular element (5) and a body (6) in which there is provided a female housing (7) with substantially longitudinal development and provided with an inlet opening (71) and a bottom (72) defined on the opposite side of said inlet opening (71), said female housing (7) being suitable to slidably receive said male tubular element (5), said male tubular element (5) being associated to said butt plate (3) and said body (6) being associated to said main support structure (2) or vice versa;

characterised in that said body (6) comprises a through hole (13) defined at said bottom (72) according to a development direction substantially parallel to the development axis of said female housing (7), said through hole (13) being configured to receive a micrometric screw (14)

suitable to be manoeuvred along said female housing (7) so as to define an end stop element to limit the movement of said male tubular element (5) inside said female housing (7).

2. Butt (1) according to claim 1, **characterised in that** said body (6) has:

- a slit (9) which extends from said inlet opening (71) of said female housing (7) according to a direction substantially parallel to the development axis of said female housing (7);
- compression means (10) of the reversible type configured to approach the walls (9a, 9b) of said slit (9) and of said female housing (7) in a direction substantially orthogonal to the development axes of said slit (9) and said female housing (7).

3. Butt (1) according to claim 2, **characterised in that** said compression means (10) comprise a bolt system (11) arranged passing through a hole (12) defined on said body (6), transverse to said slit (9).

4. Butt (1) according to any one of the preceding claims, **characterised in that** it comprises at least one bushing (8) arranged along said female housing (7).

5. Butt (1) according to any one of the preceding claims, **characterised in that** the transverse sections of said male tubular element (5) and said female housing (7) are circularly shaped.

6. Butt (1) according to any one of the preceding claims, **characterised in that** it comprises a cheek piece (16) connected to said main support structure (2) through second coupling means (17) of the adjustable type so as to allow varying the position of said cheek piece (16) with respect to said main support structure (2).

7. Butt (1) according to any one of the preceding claims, **characterised in that** said butt plate (3) is associated to said coupling means (4) through an adjustment unit (15) configured to allow varying the inclination of said butt plate (3) with respect to said main support structure (2).

8. Firearm (100, 101) comprising a barrel (102), a firing mechanism (103) and a butt (1) according to any one of the preceding claims.

Patentansprüche

1. Kolben (1) für eine Feuerwaffe (100, 101) Folgendes umfassend:

- eine Haupttragstruktur (2), dazu geeignet, voll-

ständig mit dem Lauf (102) und dem Abschussmechanismus (103) der besagten Feuerwaffe (100, 101) verbunden zu werden;

- eine Kolbenkappe (3), dazu geeignet, den durch die besagte Feuerwaffe (100, 101) erzeugten Rückstoß zu absorbieren;

- Mittel (4) zur Kupplung der besagten Haupttragstruktur (2) an die besagte Kolbenkappe (3), wobei die besagten Kupplungsmittel (4) vom verstellbaren Typ sind und in der Lage sind, die Verstellung der Position der besagten Kolbenkappe (3) bezüglich der besagten Haupttragstruktur (2) entlang der durch die Längsverlaufsachse des besagten Kolbens (1) definierten Richtung zu erlauben, wobei die besagten Kupplungsmittel (4) ein röhrenförmiges Steckelement (5) umfassen sowie einen Körper (6), in dem eine Aufsteckaufnahme (7) vorhanden ist, die im Wesentlichen längs verläuft und mit einer Eingangsöffnung (71) versehen ist sowie mit einem Boden (72), welcher an der der besagten Eingangsöffnung (71) entgegengesetzten Seite definiert ist, wobei die besagte Aufsteckaufnahme (7) geeignet ist, das besagte röhrenförmige Steckelement (5) gleitend aufzunehmen, wobei das besagte röhrenförmige Steckelement (5) mit der besagten Kolbenkappe (3) verbunden ist und der besagte Körper (6) mit der besagten Haupttragstruktur (2) verbunden ist oder umgekehrt;

dadurch gekennzeichnet, dass der besagte Körper (6) eine Durchgangsbohrung (13) umfasst, die einer im Wesentlichen zu der Verlaufsachse der besagten Aufsteckaufnahme (7) parallelen Verlaufsrichtung entsprechend an dem besagten Boden (72) definiert ist, wobei die besagte Durchgangsbohrung (13) dazu konfiguriert ist, eine mikrometrische Schraube (14) aufzunehmen, die dazu geeignet ist, entlang der besagten Aufsteckaufnahme (7) manövriert zu werden, um ein Anschlagelement zu definieren, um die Bewegung des besagten röhrenförmigen Steckelements (5) innerhalb der besagten Aufsteckaufnahme (7) zu begrenzen.

2. Kolben (1) nach Patentanspruch 1, **dadurch gekennzeichnet, dass** der besagte Körper (6) Folgendes aufweist:

- einen Schlitz (9), der sich von der besagten Eingangsöffnung (71) der besagten Aufsteckaufnahme (7) einer im Wesentlichen zu der Verlaufsachse der besagten Aufsteckaufnahme (7) parallelen Richtung entsprechend erstreckt;

- Kompressionsmittel (10) vom reversiblen Typ, dazu konfiguriert, sich den Wänden (9a, 9b) des besagten Schlitzes (9) und der besagten Aufsteckaufnahme (7) in einer im Wesentlichen zu

den Verlaufsachsen des besagten Schlitzes (9) und der besagten Aufsteckaufnahme (7) orthogonalen Richtung anzunähern.

3. Kolben (1) nach Patentanspruch 2, **dadurch gekennzeichnet, dass** die besagten Kompressionsmittel (10) ein Bolzensystem (11) umfassen, das durch eine an dem besagten Körper (6) quer zu dem besagten Schlitz (9) definierte Bohrung (12) hindurch angeordnet ist.

4. Kolben (1) nach einem jeden der vorstehenden Patentansprüche, **dadurch gekennzeichnet, dass** er wenigstens eine an der besagten Aufsteckaufnahme (7) entlang angeordnete Buchse (8) umfasst.

5. Kolben (1) nach einem jeden der vorstehenden Patentansprüche, **dadurch gekennzeichnet, dass** die Querschnitte des besagten röhrenförmigen Steckelements (5) und der besagten Aufsteckaufnahme (7) kreisförmig sind.

6. Kolben (1) nach einem jeden der vorstehenden Patentansprüche, **dadurch gekennzeichnet, dass** er eine Backe (16) umfasst, die über zweite Kupplungsmittel (17) vom verstellbaren Typ mit der besagten Haupttragstruktur (2) verbunden ist, um die Veränderung der Position der besagten Backe (16) bezüglich der besagten Haupttragstruktur (2) zu erlauben.

7. Kolben (1) nach einem jeden der vorstehenden Patentansprüche, **dadurch gekennzeichnet, dass** die besagte Kolbenkappe (3) über eine Verstelleinheit (15), die dazu konfiguriert ist, die Veränderung der Neigung der besagten Kolbenkappe (3) bezüglich der besagten Haupttragstruktur (2) zu erlauben, mit den besagten Kupplungsmitteln (4) verbunden ist.

8. Feuerwaffe (100, 101), einen Lauf (102), einen Abschussmechanismus (103) und einen Kolben nach einem jeden der vorstehenden Patentansprüche umfassend.

Revendications

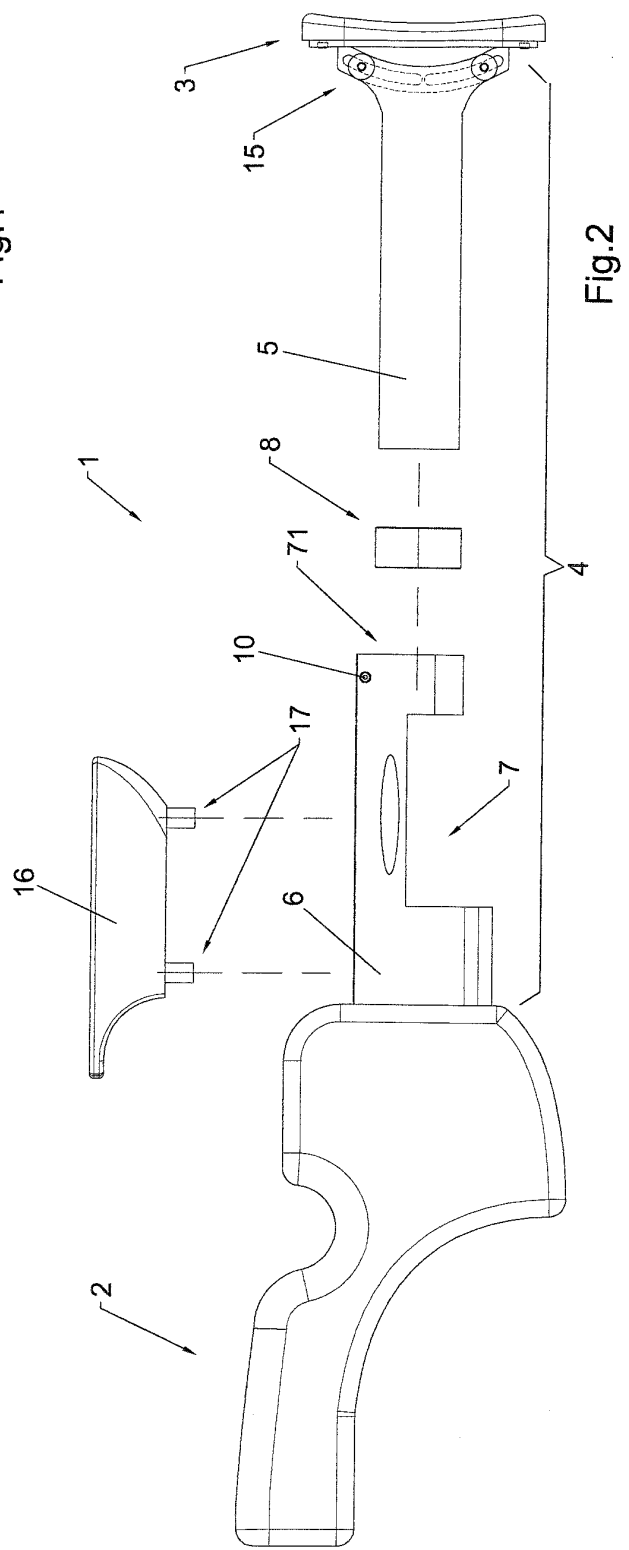
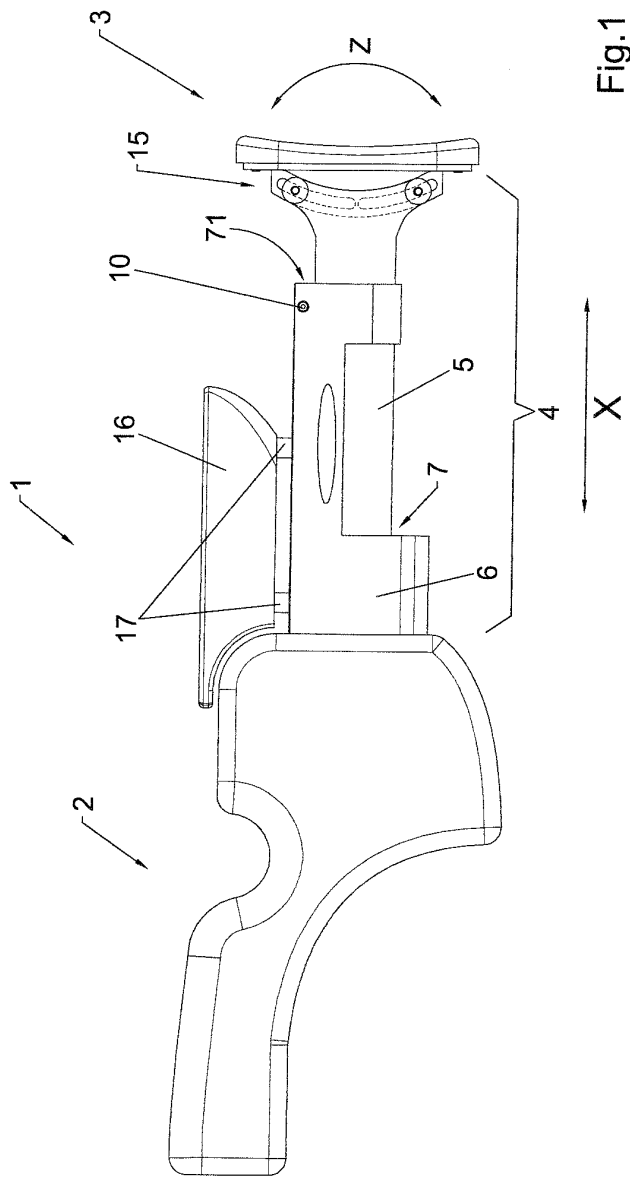
1. Crosse (1) pour une arme à feu (100, 101) comprenant:

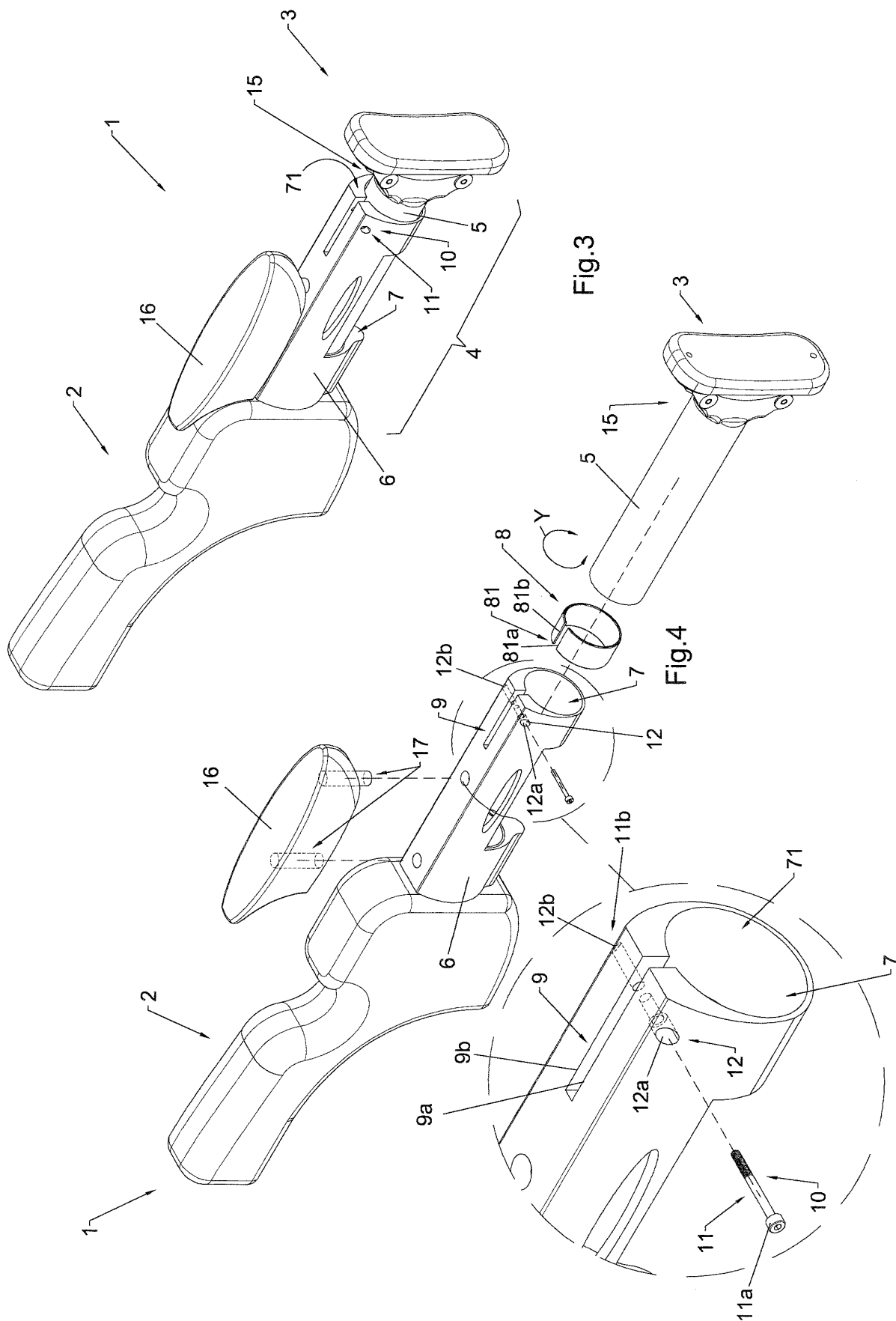
- une structure de support principale (2) apte à être associée de manière solidaire au canon (102) et au mécanisme de tir (103) de ladite arme à feu (100, 101);

- une plaque de couche (3) apte à absorber le recul généré par ladite arme à feu (100, 101);

- des moyens d'accouplement (4) de ladite structure de support principale (2) à ladite plaque de couche (3),

- lesdits moyens d'accouplement (4) étant de type réglable et en mesure de consentir de varier la position de ladite plaque de couche (3) par rapport à ladite structure de support principale (2) le long de la direction définie par l'axe de développement longitudinal de ladite crosse (1), lesdits moyens d'accouplement (4) comprenant un élément tubulaire mâle (5) et un corps (6) dans lequel est réalisé un logement femelle (7) à développement essentiellement longitudinal et doté d'une ouverture d'entrée (71) et d'un fond (72) défini sur le côté opposé de ladite ouverture d'entrée (71), ledit logement femelle (7) étant apte à accueillir de manière coulissante ledit élément tubulaire mâle (5), ledit élément tubulaire mâle (5) étant associé à ladite plaque de couche (3) et ledit corps (6) étant associé à ladite structure de support principale (2) ou vice-versa; **caractérisée en ce que** ledit corps (6) comprend un trou passant (13) défini à hauteur dudit fond (72) selon une direction à développement essentiellement parallèle à l'axe de développement dudit logement femelle (7), ledit trou passant (13) étant configuré de manière à accueillir une vis micrométrique (14) apte à être manoeuvrée le long dudit logement femelle (7) de manière à définir un élément de fin de course pour limiter le mouvement dudit élément tubulaire mâle (5) à l'intérieur dudit logement femelle (7).
2. Crosse (1) selon la revendication 1, **caractérisée en ce que** ledit corps (6) présente:
- une fente (9) qui s'étend de ladite ouverture d'entrée (71) dudit logement femelle (7) selon une direction essentiellement parallèle à l'axe de développement dudit logement femelle (7);
 - des moyens de compression (10) de type réversible configurés pour s'approcher des parois (9a, 9b) de ladite fente (9) et dudit logement femelle (7) dans une direction essentiellement perpendiculaire aux axes de développement de ladite fente (9) et dudit logement femelle (7).
3. Crosse (1) selon la revendication 2, **caractérisée en ce que** lesdits moyens de compression (10) comprennent un système de boulons (11) disposé de manière passante à travers un trou (12) défini sur ledit corps (6), transversalement à ladite fente (9).
4. Crosse (1) selon l'une quelconque des revendications précédentes, **caractérisée en ce qu'elle** comprend au moins une bague (8) disposée le long dudit logement femelle (7).
5. Crosse (1) selon l'une quelconque des revendications précédentes, **caractérisée en ce que** les sections transversales dudit élément tubulaire mâle (5) et dudit logement femelle (7) présentent une forme circulaire.
6. Crosse (1) selon l'une quelconque des revendications précédentes, **caractérisée en ce qu'elle** comprend un mentonnet (16) relié à ladite structure de support principale (2) par de deuxièmes moyens d'accouplement (17) de type réglable de manière à consentir de varier la position dudit mentonnet (16) par rapport à ladite structure de support principale (2).
7. Crosse (1) selon l'une quelconque des revendications précédentes, **caractérisée en ce que** ladite plaque de couche (3) est associée auxdits moyens d'accouplement (4) par une unité de réglage (15) configurée de manière à consentir de varier l'inclinaison de ladite plaque de couche (3) par rapport à ladite structure de support principale (2).
8. Arme à feu (100, 101) comprenant un canon (102), un mécanisme de tir (103) et une crosse (1), selon l'une quelconque des revendications précédentes.





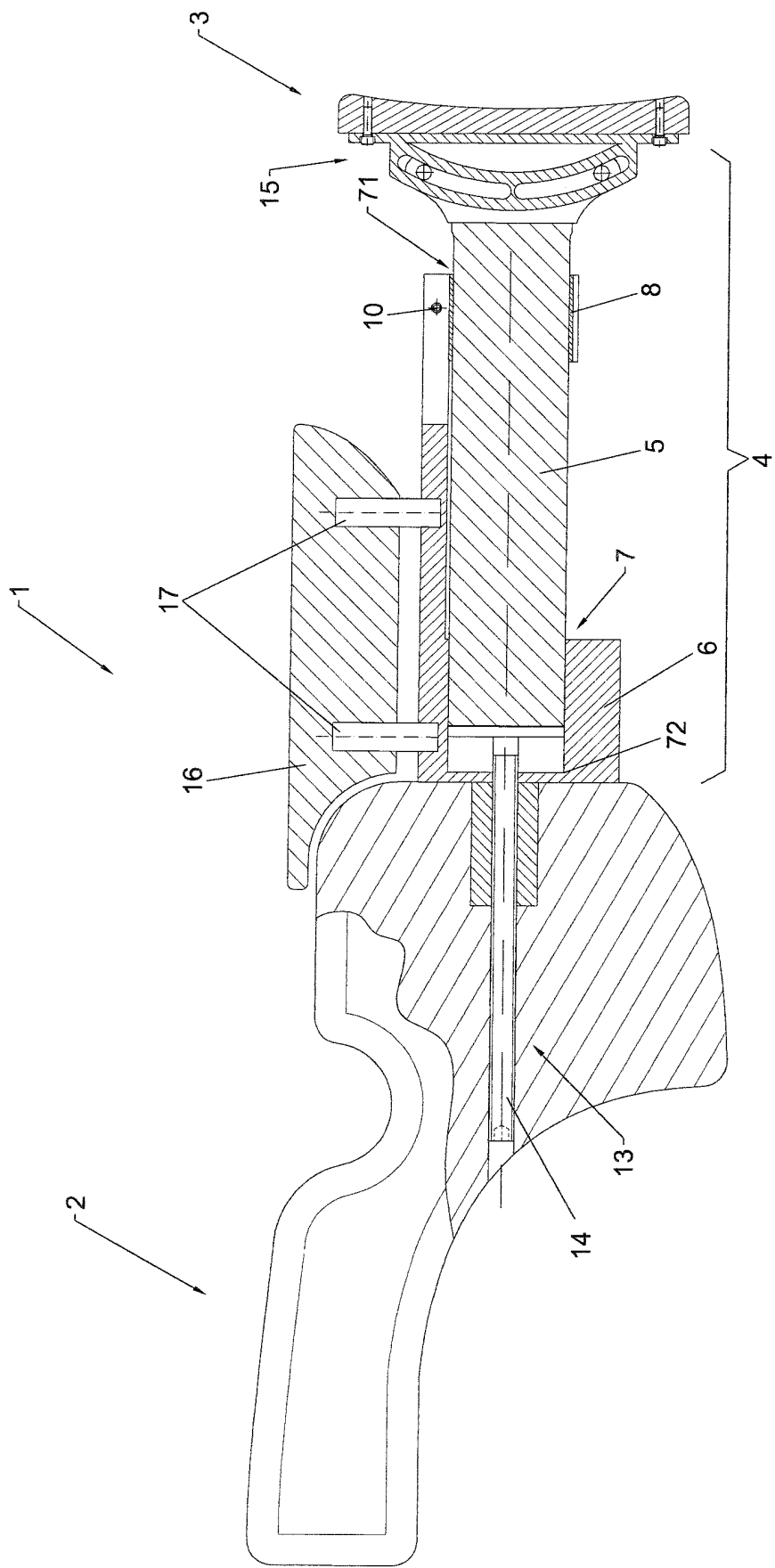
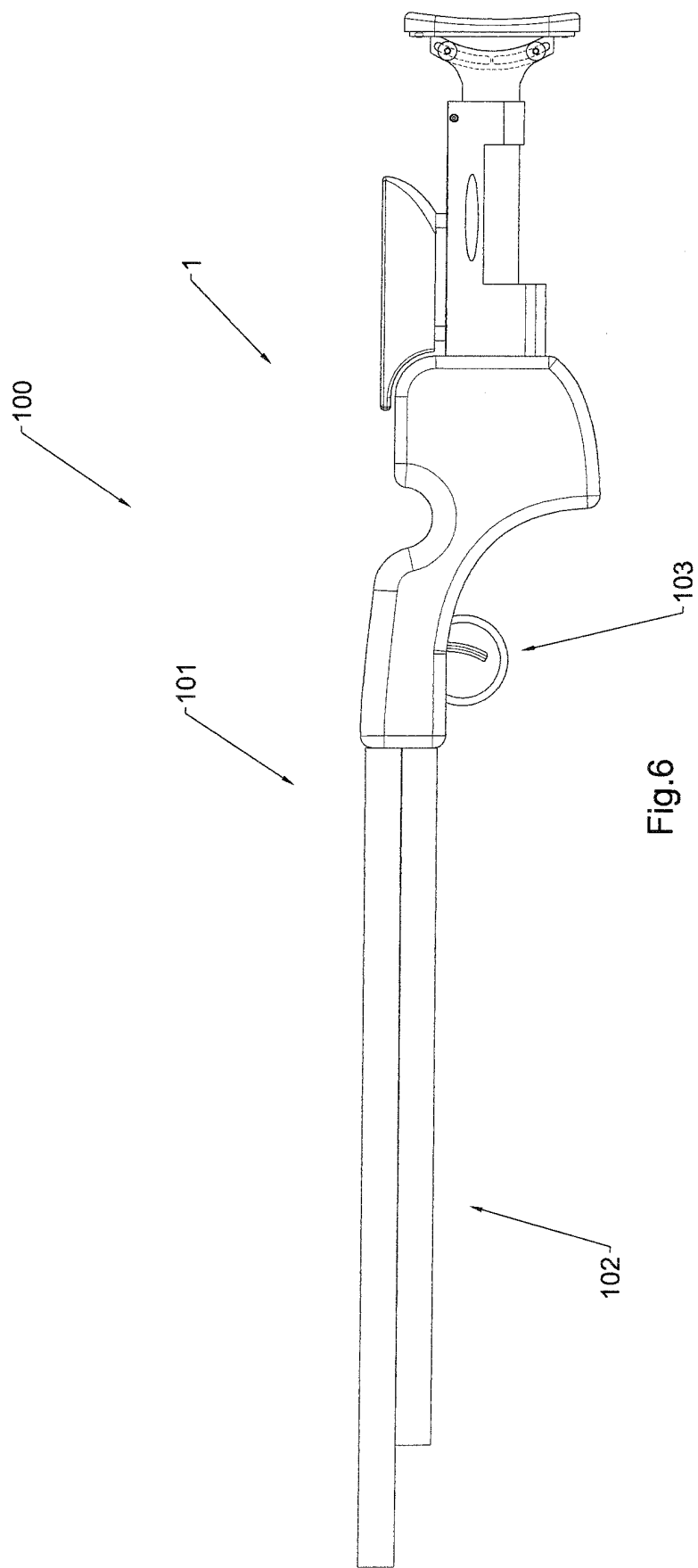


Fig.5



REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

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