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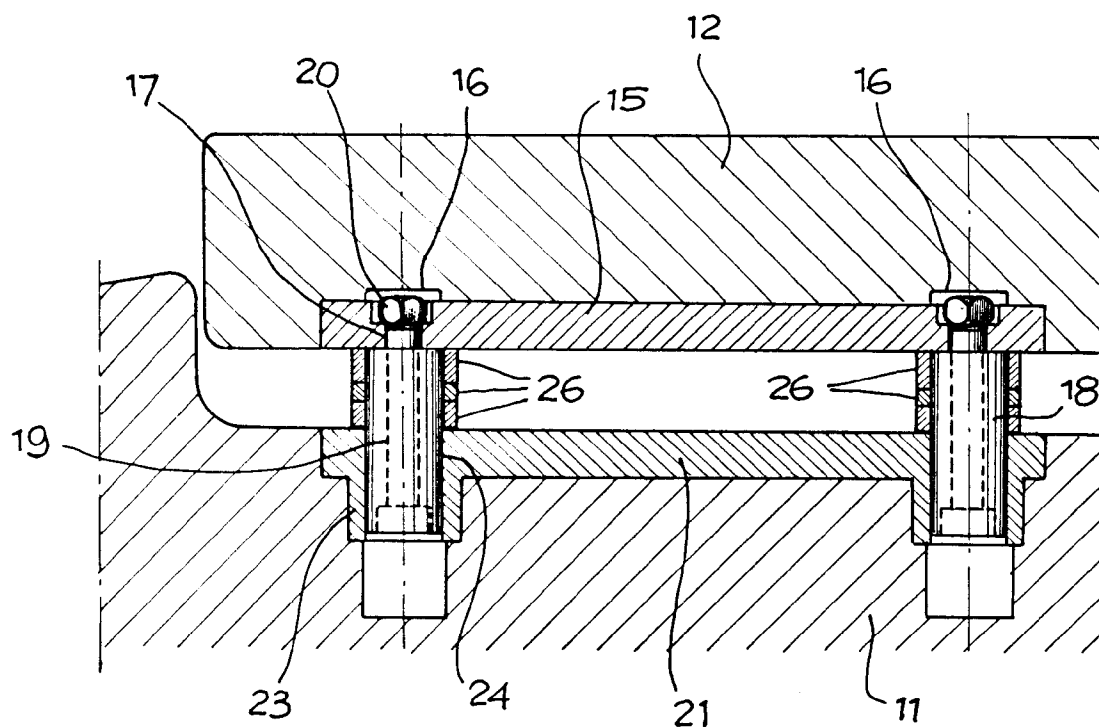
24.04.1996 Bulletin 1996/17(51) Int Cl.⁶: **F41C 23/14**(21) Application number: **95830128.5**(22) Date of filing: **31.03.1995**

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AT BE CH DE ES FR GB GR IT LI PT SE(72) Inventor: **Perazzi, Daniele****I-25017 Lonato (Brescia) (IT)**(30) Priority: **21.10.1994 IT BS940125**(74) Representative: **Manzoni, Alessandro****MANZONI & MANZONI,
UFFICIO INTERNAZIONALE BREVETTI,
P.le Arnaldo 2**(71) Applicant: **ARMI PERAZZI S.r.l.****I-25080 Botticino Mattina (Brescia) (IT)****I-25121 Brescia (IT)****(54) Butt for rifles having cheekpiece with adjustable position**

(57) The present invention pertains to a butt for rifles, including a main body and of a movable cheekpiece which is applied to the upper part of the said main body and is capable of both height and lateral displacements and positionings. The main body has a plate with two

vertical holes. The cheekpiece has two stud bolts, which can be displaced in width and are intended to be inserted and to be locked in the holes. On the stud bolts are mounted spacer rings, which determine the height of the cheekpiece on the main body.

*Fig. 3*

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Description

The present invention pertains to butts for rifles, and more particularly, a butt having a cheek support part with adjustable position, this part henceforth being called a cheekpiece.

Butts for rifles having a cheekpiece with adjustable position, but in which the adjustment of the cheekpiece is carried out by acting on one or more adjusting screws, are already known. Their design is relatively complicated and expensive, and the adjustment of the cheekpiece is difficult.

It is an object of the present invention to provide a butt for rifles having a cheekpiece which is very simple and easy to adjust both in height and transversely for its precise adaptation to the conditions of sight and aiming of the rifle.

Another object of the present invention is to provide a butt for rifles having a cheekpiece, whose adjustment in height is simply carried out by applying spacer rings of varying thickness on the stud bolts between the butt and the cheekpiece, without having to resort to, and to operate, adjusting screws.

The objects are achieved with a butt for rifles comprised of a main body and of a movable cheekpiece, which is applied to the upper part of the main body and is capable of both height and lateral displacement and positioning along stud bolts on a guide plate. Spacer rings of different thicknesses may be selectively arranged between the main body and the cheekpiece in order to calibrate the height of the cheekpiece above the main body of the butt, the spacer rings being applied to the stud bolts.

The various features of novelty which characterize the invention are pointed out with particularity in the claims annexed to and forming a part of this disclosure. For a better understanding of the invention, its operating advantages and specific objects attained by its uses, reference is made to the accompanying drawings and descriptive matter in which preferred embodiments of the invention are illustrated.

In the drawings:

- Figure 1 is an exploded perspective view of the two components of the butt and the spacer rings in a first embodiment of the present invention;
- Figure 2 is a cross section of the butt in relation to the stud bolts supporting the cheekpiece;
- Figure 3 is a longitudinal sectional view of the butt according to the line III-III in Figure 2;
- Figure 4 is a plane view of the part of the device applied to the cheekpiece;
- Figure 5 is an exploded perspective view of the two components of the butt and the spacer rings according to another embodiment of the present invention;
- Figure 6 is a cross sectional view of the butt in Figure

1 when assembled; and

Figure 7 shows a partial longitudinal section of the butt according to the line VII-VII in Figure 6.

The butt for rifles is comprised of a main body 11 and of an additional component, called the cheekpiece 12. In its upper part, the body 11 is provided with a depression 13, and the cheekpiece 12 is arranged in the depression with the possibility of adjustment both in height and in the direction of its width, that is, transversely.

According to the embodiment shown in Figures 1-4, attached longitudinally to the base of the cheekpiece 12, by means of screws 14, is a guide plate 15, which lies above two cavities 16 made in the base. The plate 15 is provided with two slots 17, which are parallel to one another, are placed in relation to the cavities 16 and are directed transversely to the cheekpiece and thus transversely to the butt. Two guide stud bolts 18, to which the cheekpiece is attached, are perpendicularly anchored to the plate 15.

Each of the stud bolts 18 (see Figures 2 and 3) is in the form of a tubular component and is axially passed through by an anchorage screw 19. The stud bolt 18 has a foot 18' that is inserted smoothly into a respective slot 17 of the plate 15, and the anchorage screw 19 has a head embedded in the head of the stud bolt and a shank which is screwed into a nut 20, which is placed and held behind the plate 15 in a cavity 16, without the possibility of rotating.

It is possible to lock and release the stud bolts 18 on the plate by acting on the anchorage screws 19, which interact with the respective nuts 20. When the anchorage screws are released, each stud bolt 18 can be displaced and positioned along the respective slot 17 in the direction transverse to the cheekpiece and relocked in the desired position. This makes it possible to adjust the lateral position of the cheekpiece, to the right or to the left (viewing Figure 2). A millimeter scale 15' (see Figure 4), which is inserted on the face of the plate 15 adjacently to each slot 17, makes it possible to visualize the position of the stud bolt.

For its part, the main body 11 has, in its depression 13, a metallic support 21, which is attached by means of screws 22. This support has two bushing sections 23, embedded in the body 11, which define two holes 24 with parallel axes and extending in the direction of the height of the butt.

The holes 24 have a distance between centers, which is equal to that of the stud bolts 18, and they are dimensioned to accommodate same. A radial hole for a threaded bolt 25, which is accessible with an operating wrench through a lateral hole 11' provided in the main body 11, is made in the support 21 at the level of each bushing section 23 with the hole 24. The threaded bolts 25 make it possible to lock and release the stud bolts 18, and to adjust, with these bolts 25, the cheekpiece at any height above the body 11.

In the embodiment shown in Figures 5-7, in which the same or similar parts are indicated with the same reference numbers, the guide plate 15 and the support 21 are in inverted positions in the sense that the plate 15 is attached to the main body, and the support 21 is attached to the cheekpiece. Therefore, the plate 15 is attached, by means of screws 14, in the depression of the body 11 above two cavities 16 provided in the bottom of the depression. The plate 15 is again provided with two slots 17, which are parallel to one another in relation to the two cavities 16 and are directed transversely to the butt.

Two guide stud bolts 18, to which the cheekpiece 12 is attached, are perpendicularly anchored to the plate 15.

Each stud bolt 18 is passed through axially by an anchorage screw 19. The stud bolt 18 has a foot 18', which is smoothly inserted into a respective slot 17 of the plate 15, and the anchorage screw 19 has a head at the top of the stud bolt and a shank, which is screwed into a nut 20, which is placed and held under the plate 15 in the cavity 16, without the possibility of rotating.

It is possible to lock and release the stud bolts 18 on the plate 15 and thus to the body 11 by acting on the anchorage screws 19. When the anchorage screws are released, each stud bolt 18 can be displaced and positioned along the respective slot 17 and can be relocked in the desired position, which makes it possible to adjust the width position of the cheekpiece on the body.

The metallic support 21 is attached to the base of the cheekpiece by means of screws 22. This support has two bushing sections 23, which define two holes 24, which extend in the direction of the height of the butt, are parallel and are dimensioned to accommodate the stud bolts 18. A radial hole for a threaded bolt 25, which is accessible with an operating wrench through a lateral hole 12' made in the cheekpiece 12, is made in the support 13, at the level of each bushing section 23 with the hole 24. The threaded bolts 25 make it possible to lock and release the cheekpiece 12 on the stud bolts 18 at any height along same.

In both embodiments, the cheekpiece 12, in addition to being able to be positioned transversely, can be adjusted in height along the stud bolts 18. The height of the cheekpiece 12 above the main body 11 is controlled with the use of spacer rings 26, which are of various thickness and are removably threaded on the stud bolts 18 in order to end up between the plate 15 and the support 21 of the cheekpiece. Therefore, by making use of more spacer rings 26 of different calibrated thicknesses and by using them selectively, it is possible to set into position from time to time, and to calibrate, the height of the cheekpiece, by then stabilizing its height by means of attaching the cheekpiece to the stud bolts by means of the locking bolts 25.

Graduated scales 27, 28 (Figure 7), which are inserted in the vertical direction on the rear of the cheekpiece and in the transverse direction on the main body

of the butt, respectively, indicate the positions attributed to the cheekpiece from time to time.

While specific embodiments of the invention have been shown and described in detail to illustrate the application of the principles of the invention, it will be understood that the invention may be embodied otherwise without departing from such principles.

10 Claims

1. Butt for rifles, comprising:

a main body;
a moveable cheekpiece applied to an upper part of said main body;
stud bolts attached to one of said cheekpiece and said main body for connecting said cheekpiece to said main body, said cheekpiece being displaceably fixable to said main body at varied height and lateral positions;
spacer rings of various thicknesses, selectively arranged between said main body and said cheekpiece to set a height of said cheekpiece above said main body, said spacer rings being applied to said stud bolts.

2. Butt for rifles according to claim 1, wherein a guide plate is attached to a base of said cheekpiece, said guide plate supporting two vertical stud bolts, said guide plate including means for fixing said stud bolts in one of a plurality of positions along a direction transverse an extent of to said cheekpiece; a support in said main body including holes with vertical axes, said holes for receiving said stud bolts, whereby said spacer rings are disposed on said stud bolts varying in number and extent, between the main body and the cheekpiece, with said stud bolts attached in said holes of said support to set a height position of said cheekpiece above said main body.

3. Butt for rifles according to claim 1, wherein said attachment means of said guide plate includes slots, said vertical stud bolts being anchored and positioned in said slots, said slots being disposed transversely in said guide plate at a base of said cheekpiece; said support on said main body including locking bolt means accessible via a wrench through lateral holes in said main body, for locking said stud bolts in said holes.

4. Butt for rifles according to claim 2, wherein said attachment means of said guide plate includes slots, said vertical stud bolts being anchored and positioned in said slots, said slots being disposed transversely in said guide plate at a base of said cheekpiece; said support on said main body includ-

ing locking bolt means accessible via a wrench through lateral holes in said main body, for locking said stud bolts in said holes.

5. Butt for rifles according to claim 1, wherein said two vertical stud bolts are connected to said main body, said main body including displacement means for displacing said vertical stud bolts in a width direction, transverse to said main body, said cheekpiece including holes for receiving said stud bolts whereby said spacer wings are applied, varying the number and extent on said stud bolts between said main body and said cheekpiece and said cheekpiece is attached to said stud bolts to stabilize a selected position in height. 5 10 15
6. Butt for rifles according to claim 5, wherein said guide plate is attached to said main body, said displacement means including slots formed in said guide plate, provided extending transversely to said guide plate; locking bolt means for attaching said cheekpiece to said vertical stud bolts, said locking bolt means being accessible with an operating wrench through lateral holes formed in said cheekpiece. 20 25
7. Butt for rifles according to claim 2, wherein a millimeter scale, which indicates the lateral displacement of said cheekpiece with respect to said stud bolts, is provided on said guide plate. 30

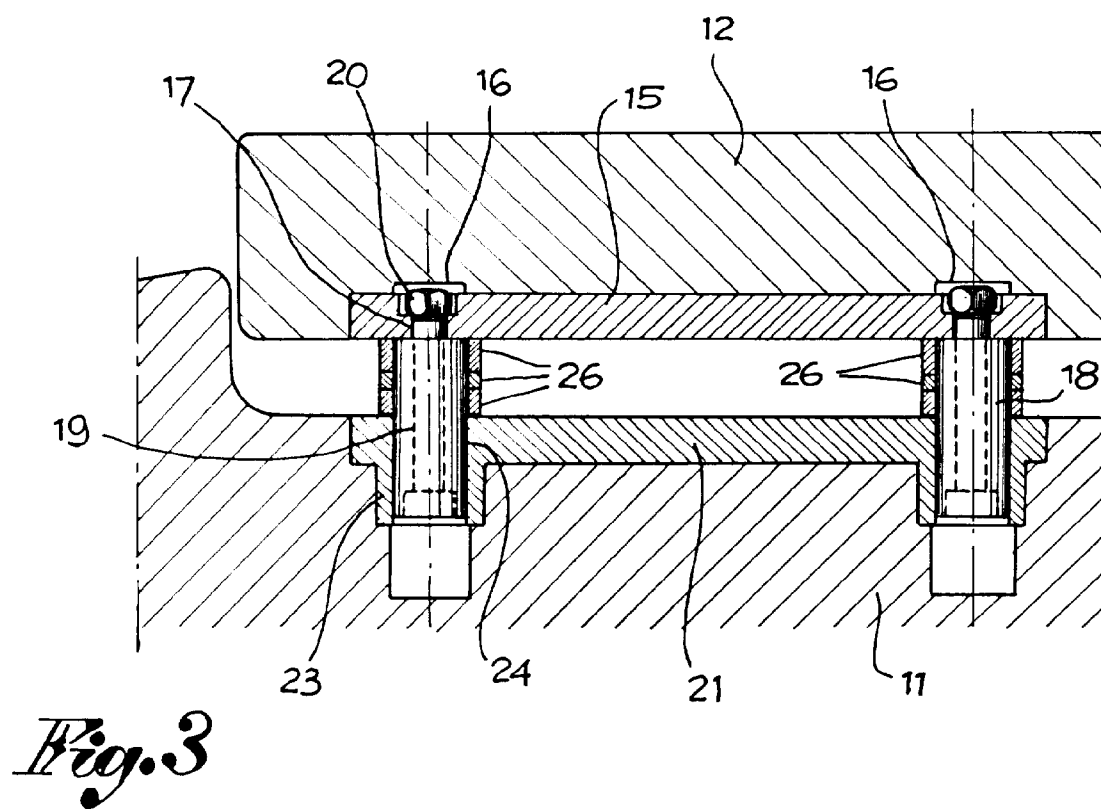
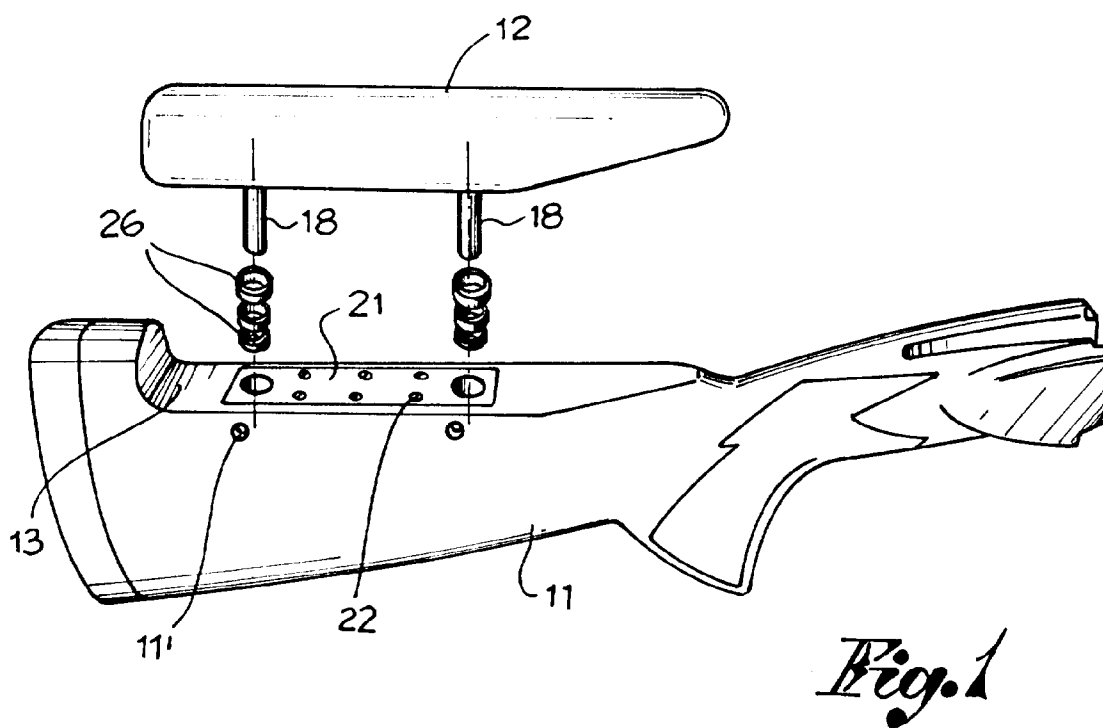
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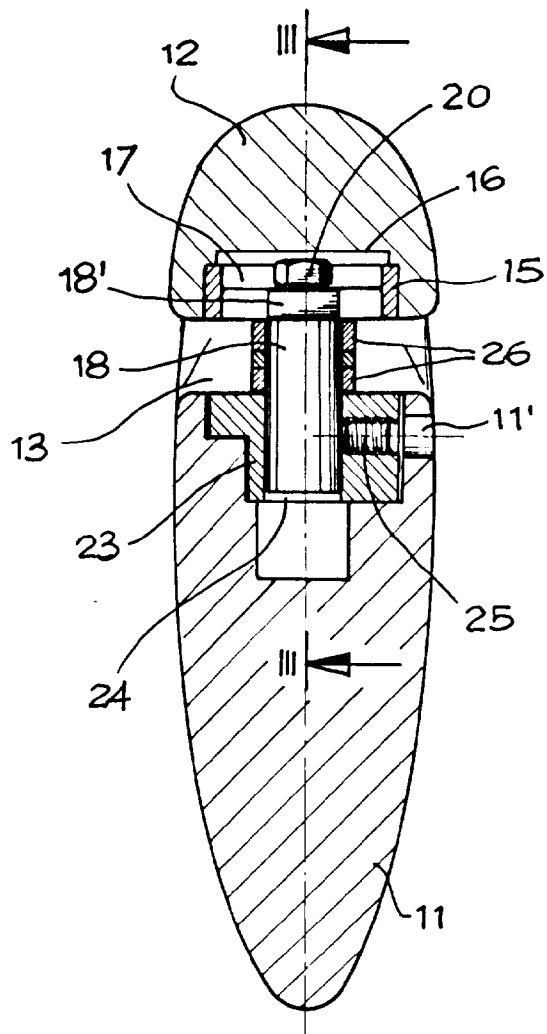


Fig. 2

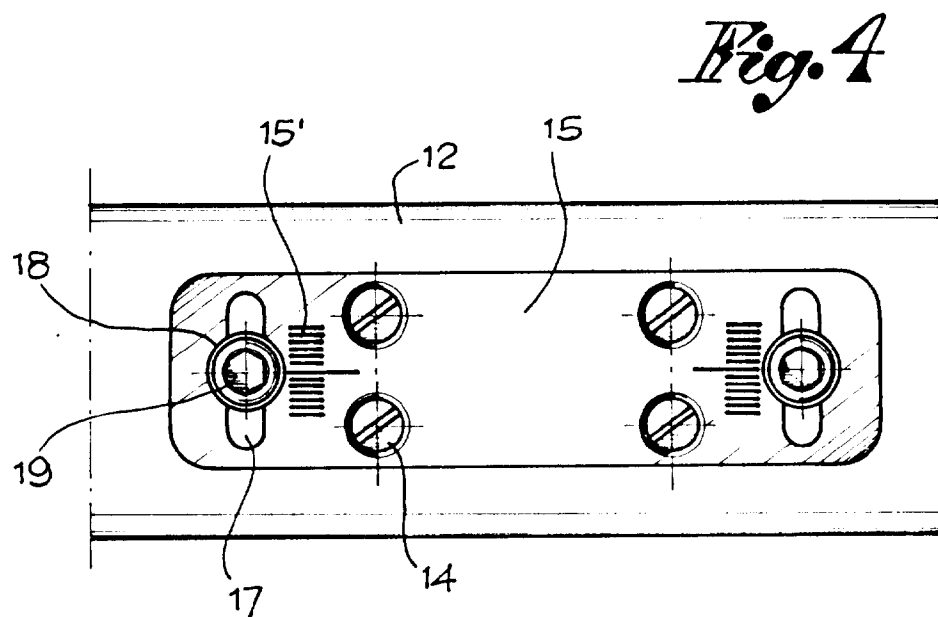
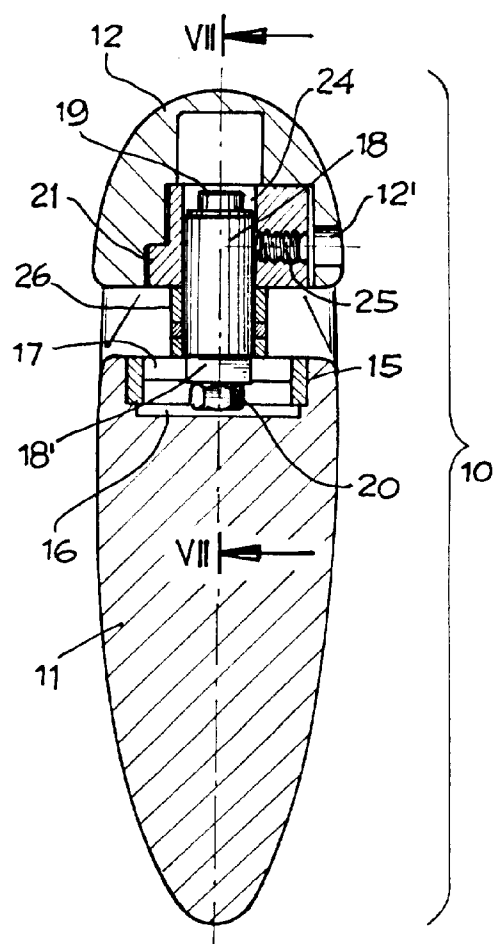
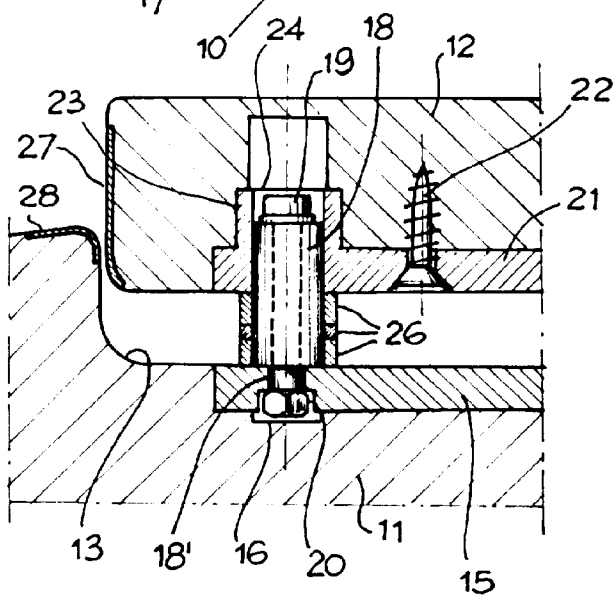
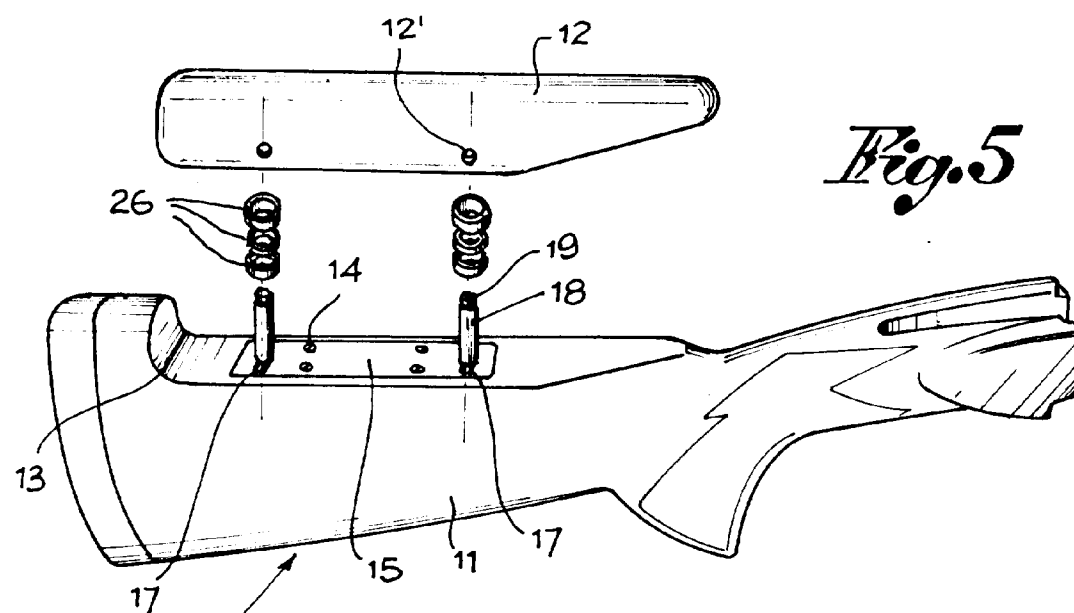


Fig. 4





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EUROPEAN SEARCH REPORT

Application Number
EP 95 83 0128

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.6)
X	DE-A-42 10 007 (PERAZZI) * the whole document *	1-7	F41C23/14
A	DE-A-31 29 182 (MAUCHER) * page 6, line 25; figures *	1	
A	US-A-5 031 348 (CAREY) * figures 3,4 *	1-4	
A	US-A-2 432 519 (GARAND) * figure 1 *	1	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			F41C
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 24 January 1996	Examiner Rodolause, P
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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