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(54) **Device for mechanical remote action of tactical flashlights for rifles and handguns**

(57) Device for mechanical remote action of tactical flashlights for rifles and handguns, being of use for its adaptation to all manner of rifles and handguns and whose adaptation is carried out by means of a bushing or body which is fixed to the gun, characterized in that the device comprises a bushing (2) provided with an axial flange (4) which holds a rotating lever (5) for actuating a switch (6) for a tactical flashlight (1) housed in said bushing (2) via its rear cover (3).

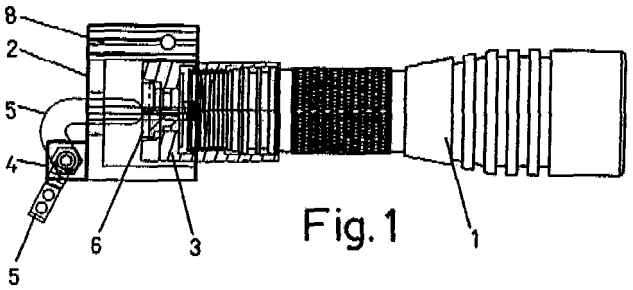

Fig. 1

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Description

[0001] As stated in the title of this descriptive specification, the present invention relates to a device for mechanical remote action of tactical flashlights for rifles and handguns, being of use for its adaptation to all manner of rifles and handguns, with the aim of facilitating the actuation of the flashlight without modifying the position of manually holding the gun.

[0002] Likewise, given that the device presents a minimum volume, the adaptation of the flashlight to the gun is carried out quickly and simply, this being of greater importance in its adaptation to handguns.

[0003] Also, given that the securing of the flashlight to the gun is carried out via the cover, the actuation in constant mode is facilitated and the fastening is more comfortable and quick,

FIELD OF APPLICATION

[0004] This specification describes a device for mechanical remote action of tactical flashlights for rifles and handguns, being of application in all manner of rifles and handguns, with a minimum modification to the flashlight.

PRIOR ART OF THE INVENTION

[0005] Tactical use flashlights have a rear switch system which is difficult or impossible to use when they are built-in to a gun, and which are actuated by pressing on it. In this way, the positioning of the hands is necessarily different and depends not on the functioning of the flashlight but instead on that of the gun. This leads manufacturers to various types of solutions aimed at facilitating the actuation of the flashlight from a point other than the push-button for the tactical switch.

[0006] For this reason, the aim Is to try to facilitate the actuation of the flashlight maintaining its normal securing, in such a way that the grip is held with one hand which is used for firing and with the other hand the desired point is held and the flashlight is actuated.

[0007] Moreover, the gun is provided with a male guide with some transverse recesses for securing a bushing which holds the corresponding tactical flashlight and is located at the point desired by the user for its securing and actuation of the flashlight.

[0008] In this way we can consider the following solutions available on the market:

- Adaptation of a flashlight by means of replacing the rear cover with one provided with a cable and pad for momentary pressing. This solution allows a tactical flashlight to become converted into a flashlight for use in a gun. However, this solution presents the drawback that the cable is a weak point since it can break or become ensnared and it does not permit constant lighting without being pressed. Moreover, it is not a watertight element and it renders the flashlight useless for tactical purposes unless the original cover is replaced. Also, the length of the entire system makes it not very feasible for handguns.
- Adaptation of the flashlight by means of replacing the rear cover/push-button with one provided with a cable and pad for momentary pressing and push-button with locking in the cover. This solution allows a tactical flashlight to become converted Into a flashlight for use in a gun, as well as use of the flashlight as tactical even with the cable. This solution presents the drawback that the cable is a weak point since it can break or become ensnared and it compromises its watertightness. Also, the switch with locking is insecure for tactical uses and the length of the entire system makes it not very feasible for handguns.
- Adaptation of the flashlight by means of nozzle with housing and rod. This solution allows a tactical flashlight to become converted into a very simple and reliable flashlight for a gun without any cables. However, it presents the drawback of being bulky and is impossible to use in handguns.
- Specific flashlights for guns. Given the problems of adapting tactical flashlights to flashlights for guns, especially handguns, some manufacturers have opted to create specific models for fitting to such handguns. This solution presents the advantage of having an ergonomic adaptation. However, it has the drawback of having to buy another flashlight and, moreover, one that is of very little use once it Is off the gun. The only possibility of triggering the ignition system continues to involve a remote cable and switch. It is very often of interest to remove the source of light from the gun and this option is impossible unless there are two flashlights, one for the gun and another tactical.

DESCRIPTION OF THE INVENTION

[0009] The present specification describes a device for mechanical remote action of tactical flashlights for rifles and handguns, being of use for its adaptation to all manner of rifles and handguns and whose adaptation is carried out by means of a bushing or body which is fixed to the gun, in such a way that the device comprises a bushing provided with an axial flange which holds a rotating lever for actuating a switch for a tactical flashlight housed in said bushing via its rear cover,

[0010] In the housing of the cover for the tactical flashlight in the bushing, the rotating lever is located in proximity to the switch via one of its arms and the other arm of that rotating lever is located in proximity to the hand for holding the gun and actuating the flashlight.

[0011] The bushing is provided with a female guide for adjustment and fitting in a male guide in a gun, this female guide, with a general U-shape, being defined by the union of a piece that is fixed by a screw.

[0012] In a variant of practical embodiment, the actual rear cover of the tactical flashlight is provided with a trans-

verse shaft which holds a rotating lever for actuation of the switch for the flashlight, with a female guide body for securing to the male guide of a gun being able to be coupled to the cover of the tactical flashlight.

[0013] The female guide body incorporates a piece for adjustment and fastening by means of a screw, the two together defining a general U-shape for their union to the male guide of the gun and the guide body being fixed to the cover of the flashlight via a pair of screws,

[0014] In this way, the tactical flashlight can be coupled to the gun via a bushing that incorporates a rotating lever for actuation of the switch for the flashlight and a female guide for mounting on the gun, or it can be the cover itself of the tactical flashlight which incorporates the rotating lever for actuation of the switch for the flashlight and coupling to the gun via a guide body for its mounting on the gun.

[0015] Likewise, in a variant of practical embodiment of the invention, the bushing can be provided with a recess in which is defined a central projection. with a hole having been made in the projection into which fits a first end of the element for actuation on the switch, in such a way that. via its said first end, the element is extended in a trigger for backing onto the switch and continues according to an angle-piece in order to finish with its opposite end on the bushing.

[0016] In order to complement the description to be made forthwith, and with the aim of aiding a better understanding of the characteristics of the invention, this descriptive specification is accompanied by a set of drawings containing figures which, on an illustrative rather than limiting basis, the most characteristic details of the invention are represented.

BRIEF DESCRIPTION OF THE DESIGNS

[0017]

Figure 1.- Shows a side elevation view of a tactical flashlight mounted on a bushing that is fixed to the gun in which the bushing is provided with an axial flange which holds a lever for actuation of the switch, in its rest position.

Figure 2.- Shows a view of the tactical flashlight of the previous figure with the lever for actuation of the switch in its working position pressing on the switch for the flashlight.

Figure 3.- Shows a front view of the bushing for mounting a tactical flashlight, in which can be seen the flange which holds the lever for actuation of the switch along with the female guide and coupling device to the gun provided with the male guide.

Figure 4.- Shows a side elevation view of the bushing of the previous figure, in which can be seen the axial flange which holds the lever for actuation of the switch and a detail of the piece for adjustment of the bushing noting the hole for the passage of the securing shaft of the male guide for the gun.

Figure 5.- Shows a side elevation view of a tactical flashlight according to a variant of practical embodiment, with its cover provided with a rear shaft which holds a lever for actuation of the switch, in its rest position, as well as the securing body to the male guide for the gun.

Figure 6.- Shows a view of the tactical flashlight of the previous figure in its working position with the lever pressing on the switch for the flashlight.

Figure 7.- Shows a plan view of the securing body for the tactical flashlight with cover, in which can be seen the pair of holes for its securing by screws.

Figure 8.- Shows a plan view of the securing body for the tactical flashlight with cover of the previous figure, in which can be seen the piece for adjustment of said body with the hole for the passage of the securing shaft to the male guide for the gun.

Figure 9 - Shows an elevation view of a rifle to which a tactical flashlight has been adapted.

Figure 10.- Shows an elevation view of a handgun to which a tactical flashlight has been adapted.

Figure 11.- Shows a perspective view of an adaptation element to the bushing of a tactical flashlight for actuation of the switch.

Figure 12.- Shows a view, in detail and in perspective, of the element of the previous figure adapted to a tactical flashlight, in which It can be seen how it is fixed to the flashlight being backed on to the switch and defining an angle-piece on which one acts in order to activate the flashlight.

Figure 13.- Shows a second view, in detail and in perspective, of the element of figure 10 adapted to a tactical flashlight.

DESCRIPTION OF A PREFERRED EMBODIMENT

[0018] With the commented figures in view, and in accordance with the adopted numbering, we can see how, in a first embodiment of the invention, the tactical flashlight 1 is housed in a bushing 2, with respect to its rear cover 3, the bushing 2 being provided with an axial flange 4 which holds a rotating lever 5 for actuation of the switch 6 for the tactical flashlight 1.

[0019] In the housing of the cover 3 for the tactical flashlight 1 in the bushing 2, the rotating lever 5 is located in proximity to the switch 6 via one of its arms and the other arm of that rotating lever 5 is located in proximity to the hand for holding the gun and actuating the flashlight, in an ergonomic manner for its actuation.

[0020] Likewise, the bushing 2 includes a female guide 7, with a general U-shape, for adjustment and fitting in a male guide of a gun, this female guide 7 being defined with the collaboration of a piece 8 which is fixed to the bushing by means of a screw 9 in the transverse direction. So, by means of this female guide 7, the piece 8 is fixed at the desired point by pressing by means of the screw 9 against one side of the male guide of the gun and the screw 9 remaining positioned in a transverse recess of

the male guide.

[0021] Moreover, in a variant of practical embodiment of the invention, the actual rear cover 3 of the tactical flashlight 1 is provided with a transverse shaft which holds a rotating lever 10 for actuation of the switch 6 for the flashlight 1, with a female guide body 11 for securing to the male guide of a gun being able to be coupled to the cover 3 of the tactical flashlight.

[0022] The female guide body 11, with a general U-shape, is defined with the collaboration of a piece 12 for adjustment and fastening by means of a screw, similar to the screw 9, the guide body 11 being fixed to the cover 3 of the flashlight 1 via a pair of screws arranged in the radial direction in the pair of threaded holes 13,

[0023] So, the adaptation of the tactical flashlight 1 to the gun is carried out quickly and simply, this being of greater importance in its adaptation to handguns.

[0024] Moreover, given that the securing of the tactical flashlight 1 to the gun is carried out via a cover 3, the actuation in constant mode is facilitated and the fastening is more comfortable and quick.

[0025] In figure 9 of the designs we can see how a tactical flashlight 1, provided in its own rear cover with a lever 10 for actuation of the switch 6, has been adapted to a rifle 14 by means of a body 11, In such a manner that the lever 10 for actuation thereof remains in proximity to the positioning of the hand for holding the gun with the aim of facilitating its actuation,

[0026] Likewise, in figure 10 of the designs we can see how a tactical flashlight 1, provided in its own rear cover with a lever 10 for actuation of the switch 6, has been adapted to a handgun 15 by means of a body 11, in such a manner that the lever 10 for actuation thereof remains in proximity to the positioning of the hand for holding the gun with the aim of facilitating its actuation.

[0027] In accordance with figures 11 to 13, in a variant of practical embodiment of the invention, the element for actuation of the switch 6 for turning on the flashlight is defined by a unitary filiform body 16 which via one of its ends defines a small straight section 17 for coupling in a hole of the actual bushing 3 of the flashlight, in such a way that said small straight section 17 is extended to create a trigger 18 in a position that is practically orthogonal, which when fitted backs onto the switch 6 for the flashlight and continues according to an angle-piece 19 in order to finish with its opposite end 20 on the bushing 3.

[0028] The element 16 presents a suitable flexibility so that, when it is actuated, this permits the trigger 18 to press on the switch 6 turning on the flashlight, while when this actuation ceases it returns to its original position ceasing to act on the switch and turning off the flashlight.

[0029] The stud 17 Is housed In a hole made in a projection 21 central to a recess in the bushing 3.

[0030] In this way, the element 16 acts as a spring.

Claims

1. DEVICE FOR MECHANICAL REMOTE ACTION OF TACTICAL FLASHLIGHTS FOR RIFLES AND HANDGUNS, being of use for its adaptation to all manner of rifles and handguns and whose adaptation is carried out by means of a bushing or body which is fixed to the gun, **characterized in that** the device comprises a bushing (2) provided with an axial flange (4) which holds a rotating lever (5) for actuating a switch (6) for a tactical flashlight (1) housed in said bushing (2) via its rear cover (3).

2. DEVICE FOR MECHANICAL REMOTE ACTION OF TACTICAL FLASHLIGHTS FOR RIFLES AND HANDGUNS, according to claim 1, **characterized in that** in the housing of the cover (3) for the tactical flashlight (1) in the bushing (2), the rotating lever (5) is located in proximity to the switch (6) via one of its arms and the other arm of that rotating lever (5) is located in proximity to the hand for holding the gun and actuating the flashlight.

3. DEVICE FOR MECHANICAL REMOTE ACTION OF TACTICAL FLASHLIGHTS FOR RIFLES AND HANDGUNS, according to claim 1, **characterized in that** in the bushing (2) is provided with a female guide (7) for adjustment and fitting in a male guide of a gun, this female guide (7) being defined with the collaboration of a piece (8) which is fixed by means of a screw (9) in the transverse direction.

4. DEVICE FOR MECHANICAL REMOTE ACTION OF TACTICAL FLASHLIGHTS FOR RIFLES AND HANDGUNS, according to claim 1, **characterized in that** the actual rear cover (3) of the tactical flashlight (1) is provided with a transverse shaft which holds a rotating lever (10) for actuation of the switch (6) for the flashlight (1) via one of its arms and able to be actuated via the other arm, with a female guide body (11) for securing to the male guide of a gun being able to be coupled to the cover (3) of the tactical flashlight (1).

5. DEVICE FOR MECHANICAL REMOTE ACTION OF TACTICAL FLASHLIGHTS FOR RIFLES AND HANDGUNS, according to claims 1 and 4, **characterized in that** the female guide body (11) incorporates a piece (12) for adjustment and fastening by means of a screw, both defining a general U-shape, the female guide body (11) being fixed to the cover (3) of the flashlight (1) via a pair of screws in the radial direction housed in respective holes (13).

6. DEVICE FOR MECHANICAL REMOTE ACTION OF TACTICAL FLASHLIGHTS FOR RIFLES AND HANDGUNS, according to claim 1, **characterized in that** the bushing (3) is provided with a recess (21)

in which is defined a central projection (22), with a hole having been made in the projection (22) into which fits the end (17) of the element (16) for actuation on the switch (6), in such a way that, via its end (17), the element (16) is extended in a trigger (18) for backing onto the switch (6) and continues according to an angle-piece (19) in order to finish with its opposite end on the bushing (3).

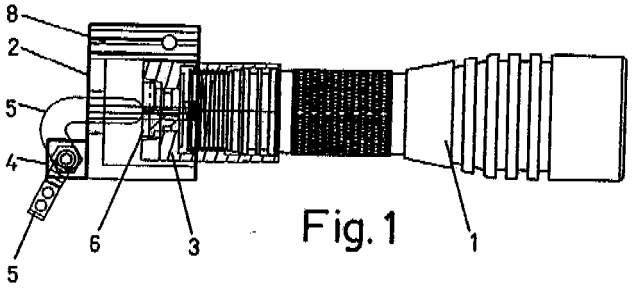

Fig. 1

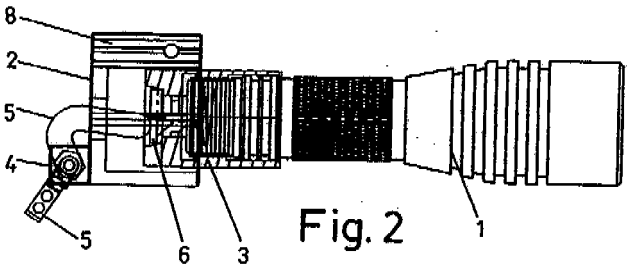

Fig. 2

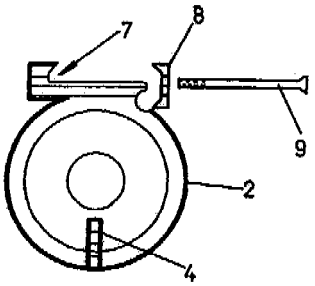

Fig. 3

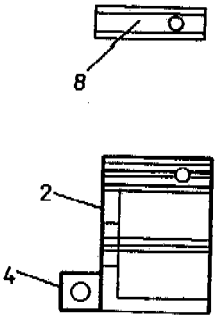

Fig. 4

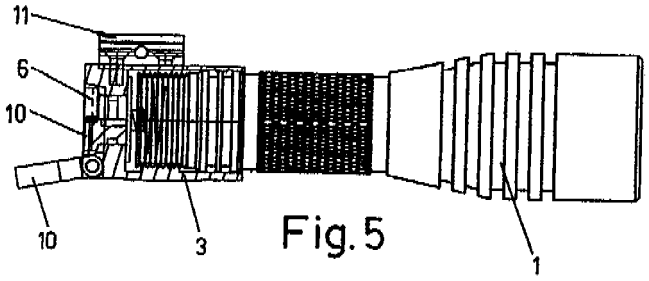

Fig. 5

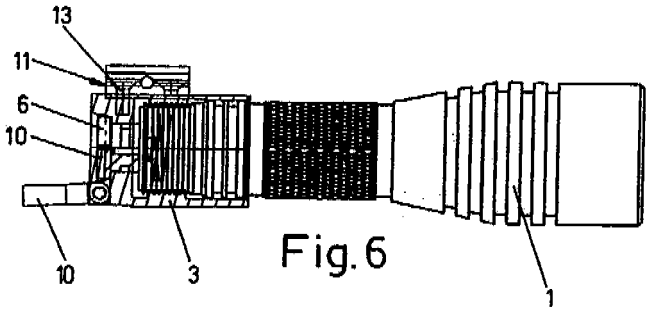

Fig. 6

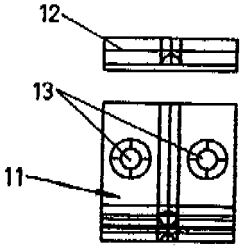

Fig. 7

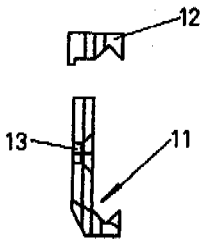

Fig. 8

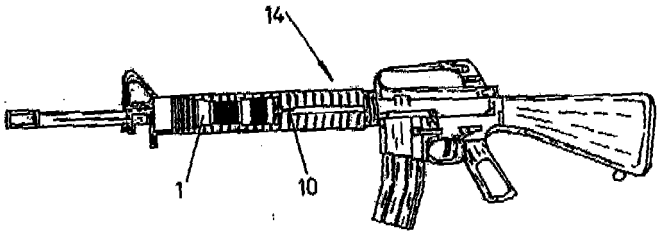

Fig. 9

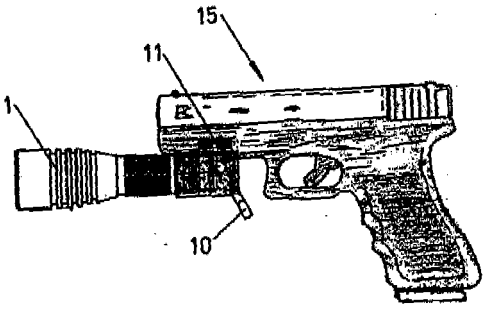

Fig. 10

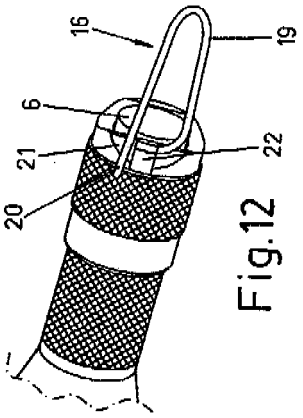

Fig.12

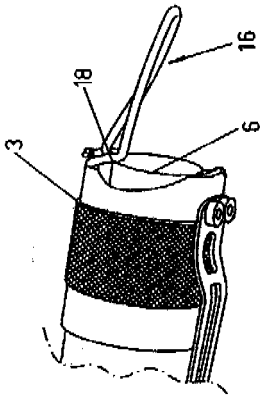

Fig.13

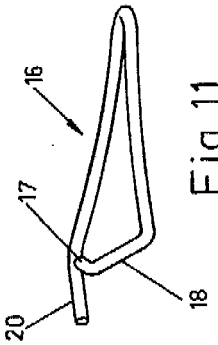

Fig.11