

PATENT SPECIFICATION (11)

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(54) WEAPON FOR FIRING CARTRIDGES, SAID WEAPON BEING PROVIDED WITH A VISUAL INDICATING DEVICE

(71) We, FABRIQUE NATIONALE HERSTAL S.A., en abrégé F.N., a body corporate organized and existing under the laws of Belgium, of 4400 Herstal, Belgium, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to a weapon for firing cartridges.

It is a well-known fact, that in a conventional machine gun where the cartridges are supplied by belts, there is no way of knowing whether or not there is a round in the feed channel, except by lifting the cover of the feed channel which shuts off the cartridge supply system.

Such an arrangement is inconvenient and the operation of lifting the cover is likely to cause the operator to be located, which is of course important to avoid.

According to the present invention there is provided a weapon for firing cartridges, said weapon being provided with a device for visually indicating whether or not a cartridge is present in the cartridge feed channel of the weapon, said device comprising a lever having one end hinged by a pin to a cover of a casing in which said feed channel is formed, said lever being provided at its other end with an indicator portion which protrudes through a slot in the cover, and resilient means acting on said lever to urge it to pivot about said hinge towards the feed channel, said lever being movable between an outer position which it has when it makes contact with a cartridge in said channel and in which said indicator portion protrudes outwardly of the cover, and an inner position to which it is urged in the absence of a cartridge in said channel and in which said portion protrudes less from the cover than it does in said outer position.

The respective outer and inner positions of the indicator portion of the lever are instantaneously visible by the operator, without effecting movement of the weapon.

The visual checking device may be fitted in the cover of the weapon case in such a manner, that the operator may at any moment and without previous handling, be informed whether or not there is a round which is ready to be fired. 50

It is obvious that the various constituent elements of the checking device can vary in their shape, their dimensions and their relative locations, providing that the construction be such, that the visual checking element itself is directly visible by the operator without altering the position of the weapon. 55 60

An embodiment of the invention will now be described, by way of an example, with reference to the accompanying drawing, in which:—

Figure 1 schematically shows a lateral view of a weapon provided with a visual checking device in accordance with the present invention. 65

Figure 2 shows on a larger scale, a section taken along the line II-II indicated in Figure 1, whereby the checking device indicates the presence of a cartridge ready to be fired, and 70

Figure 3 is a section similar to that of Figure 2, whereby however the checking device indicates the absence of any cartridge ready to be fired. 75

This illustrated embodiment shows a traditional firearm provided with a visual checking device in accordance with the present invention. In the cover 1 of a casing 2 in which the cartridge feed channel is formed, a lever 3 is hinged mounted, at one end, upon a pin 4, and the lever 3 is provided at its other end with a portion which forms an indicator 5 which protrudes from the adjacent part of the cover 1. This indicator 5 is movable in a slot 6, machined for this purpose in said cover 1. Along the extension of the centre line of a resilient element, such as for instance a spring 7, the lever 3 has a small pad 8 which can rest successively on each of the cartridges as they are forwarded by the uncoiling of the cartridge belt. 80 85 90

When the supply of cartridges is normally

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in progress, the lever 3 is urged in opposition to the reaction of said spring 7, and the indicator 5 is in its outer position, which is perfectly visible by the operator without any handling or change of position of the weapon.

In the absence of a cartridge in the feed channel of the weapon, said pad 8, and respectively the lever 3, no longer have a support and are pushed back by the spring so as to rotate around pin 4, and consequently bring indicator 5 to its inner or retracted position where it makes contact with a stop 9 provided on cover 1. When in this position the indicator 5 protrudes less from the casing than when in the outer position. By means of such a visual checking device, the operator avails of a particularly important safety feature, when taking into consideration the circumstances under which such firearms are being used. This safety is all the more efficient, because the operator, whilst keeping the butt of the firearm to his shoulder, is being informed whether he has any rounds left to fire or not.

WHAT WE CLAIM IS:—

1. A weapon for firing cartridges, said weapon being provided with a device for visually indicating whether or not a cartridge is present in the cartridge feed channel of the

weapon, said device comprising a lever having one end hinged by a pin to a cover of a casing in which said feed channel is formed, said lever being provided at its other end with an indicator portion which protrudes through a slot in the cover, and resilient means acting on said lever to urge it to pivot about said hinge towards the feed channel, said lever being movable between an outer position which it has when it makes contact with a cartridge in said channel and in which said indicator portion protrudes outwardly of the cover, and an inner position to which it is urged in the absence of a cartridge in said channel and in which said portion protrudes less from the cover than it does in said outer position.

2. A weapon as claimed in claim 1, in which said resilient means comprises a spring.

3. A weapon as claimed in claim 1 or claim 2, comprising a machine gun.

4. A weapon for firing cartridges, substantially as hereinbefore described with reference to and as illustrated in the accompanying drawing.

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