since it is done in a vulnerable position without ammunition in position ready to fire. If, during this operation, the machine gun is moved, its feed channel inclined, there is a risk that the band may not be positioned correctly once the cover is closed. The loading operation will then be followed by a malfunction (shot not started).

[0018] To sum up, the conventional machine guns present the following main drawbacks:

- The mobile cover disposed on the top of the weapon prevents the reliable positioning of fixed accessories such as a sighting scope;
- At the end of a belt, one or more links generally remain in the channel, and, the firer must generally discharge these links before being able to reload;
- The poor discharging of a link can lead to a malfunction by blocking the reloading mechanism;
- The positioning of the belt, and in particular the positioning of the last cartridge is imprecise and can thus lead to malfunctions;
- Since the belt is not held, the user must hold it until the cover is closed, which demands the use of both hands.

Summary

[0018a] In an aspect, the present disclosure refers to a machine gun comprising a feed channel for a belt of ammunition items and a cover for the feed channel, wherein a closure movement of the cover induces an adjustment of a longitudinal position of the belt of ammunition items in the feed channel, wherein the adjustment of the longitudinal position of the belt of ammunition items in the feed channel is obtained via a non-return ratchet making it possible to push the belt in the feed channel during the closure movement of the cover, and that allows for passage of the belt of ammunition items during subsequent firing cycles.

[0019] A first example of the present disclosure relates to a machine gun comprising a feed channel for an ammunition belt and a cover for the feed channel the closing movement of which induces an adjustment of the longitudinal

position of the ammunition belt in the feed channel.

[0020] Advantageously, the adjustment of the longitudinal position of the belt in the channel is obtained via an element that makes it possible to push the belt in the feed channel during the closure movement of the cover, and that allows the passage of the belt during subsequent firing cycles (non-return ratchet).

[0021] Preferably, the non-return ratchet is incorporated in the cover, and the closure movement of said cover comprises a component parallel to said feed channel, so as to allow an accurate adjustment of the first ammunition item.

[0022] Advantageously, the parallel component of the closure movement of the cover is obtained by an axis of rotation of the cover that is secant relative to the plane of the feed channel.

[0023] Advantageously, the feed channel and its cover are disposed laterally, inclined relative to the vertical, the axis of opening of the cover being essentially vertical.

[0024] Preferably, the machine gun according to the invention comprises, on its top face, a fixed accessory assembly interface, this interface being able preferably to comprise a rail of Picatinny type.

[0025] Alternatively, a system of connecting rods actuating the non-return ratchet is incorporated in the frame or in the cover to push the belt to its loading position when the cover is closed. In this case, the connecting rod or rods actuating the ratchet can for example be moved by a button or a lever extending from the frame or from the cover that is actuated by the closure.

[0026] In another alternative, an inclined surface protruding on the inner face of the cover or of the frame actuates a mobile part on the complementary inner face, said mobile part having a movement parallel to the movement of the belt and making it possible to adjust the position thereof.

[0027] A second example of the present disclosure relates to a feed mechanism for a firearm fed by an ammunition belt comprising a mechanism for ejecting the last two links of said belt.

[0028] Advantageously, this mechanism comprises a mobile ratchet pushing on the penultimate link and actuated by the mobile parts of the machine gun.

[0029] Preferably, the mobile ratchet for ejecting the last two links is secured to the belt traction mechanism.

[0030] Advantageously, the belt traction mechanism comprises a mobile ratchet pushing, in use, against an ammunition item, said ratchet pushing against the

[0038] A third example of the present disclosure relates to a machine gun comprising a feed channel comprising a main slip surface for an ammunition belt, lateral faces guiding, in use, the ammunition belt, and one or more holding surfaces for the belt positioned at the top edge of the lateral faces, said holding surfaces facing the slip surface and said holding surfaces being open, so as to allow the introduction of the ammunition belt.

[0039] Advantageously, at least one of the holding surface or surfaces is retractable, leaving free at least one top edge of the lateral faces, so as to facilitate the positioning of an ammunition belt.

[0040] Alternatively, the holding surface or surfaces are narrow and elastic, allowing an introduction "by force" of the belt.

[0041] Preferably, the holding surface or surfaces of the belt belong to runners along top edges of the lateral faces of the feed channel, at least one of these runners being retractable.

[0042] Advantageously, the retractable runner or runners are held along lateral faces of the feed channel by elastic means.

[0043] Preferably, the retractable runner or runners have an inclined top surface allowing the ammunition belt to be put in place by simply pressing the latter against the inclined surface of the runner.

[0044] Advantageously, the retractable runner or runners have a chamfer in the portion corresponding to the entry of the belt into the feed channel allowing an ammunition belt to be removed by twisting the belt.

[0045] A fourth example of the present disclosure relates to a firearm comprising a frame body having an essentially tubular geometry.

[0046] Advantageously, the firearm comprises a feed channel and a cover disposed laterally, inclined toward the outside relative to the vertical, the axis of opening of the cover being essentially vertical.

[0047] Preferably, the firearm according to the present disclosure comprises, on its top face, a fixed accessory assembly interface, this interface being preferably able to comprise a rail of Picatinny type.

[0048] It should be noted that all these examples of the present disclosure are compatible with one another and all contribute to obtaining an ease of placement of the belt in the feed channel, by emptying the latter when the last ammunition item is fired, by holding the belt in the channel when the cover is open, by correctly positioning the belt when the cover is closed and by placing the feed laterally.

Brief description of the figures

[0049] Figure 1 represents a side view of a machine gun according to the invention.

[0050] Figure 2 represents a perspective view of an example of feed channel according to the invention, with the cover open and an ammunition belt in place.

[0051] Figure 3 represents a perspective view of an example of feed channel according to the invention, with the cover open and without ammunition belt.

[0052] Figure 4 represents a cross-sectional view of a device according to the invention, the cover being partially closed.

[0053] Figure 5 represents a cross-sectional view of the device of figure 4, with the cover closed.

[0054] Figures 6 to 8 represent cross-sectional views of the device of figure 4 during a cycle of firing and of reloading a machine gun of the invention.

[0055] Figures 9 to 12 represent cross-sectional views of the device of figure 4 during the cycle of firing the last cartridge of an ammunition belt of a machine gun of the invention.

[0056] Figure 13 represents an edgewise view of a feed channel comprising belt holding means according to the invention.

[0057] Figure 14 represents a claw for advancing the belt and for ejecting the last link according to an example of the invention.

[0058] Figure 15 represents an example of machine gun frame according to the invention.

[0059] Figure 16 represents an exploded view of a feed channel according to the invention.

Claims

1. A machine gun comprising a feed channel for a belt of ammunition items and a cover for the feed channel, wherein a closure movement of the cover induces an adjustment of a longitudinal position of the belt of ammunition items in the feed channel, wherein the adjustment of the longitudinal position of the belt of ammunition items in the feed channel is obtained via a non-return ratchet making it possible to push the belt in the feed channel during the closure movement of the cover, and that allows for passage of the belt of ammunition items during subsequent firing cycles.

2. The machine gun as claimed in claim 1, wherein the non-return ratchet is incorporated in the cover, and the closure movement of said cover comprises a component parallel to said feed channel, so as to allow an accurate adjustment of a first ammunition item.

3. The machine gun as claimed in claim 2, wherein the component parallel to the feed channel is obtained by an axis of rotation of the cover that is secant relative to the plane of the feed channel.

4. The machine gun as claimed in claim 3, wherein the feed channel and the cover are disposed laterally, inclined outward relative to the vertical, the axis of rotation of the cover being essentially vertical.

5. The machine gun as claimed in claim 1, comprising, on a top face, a fixed accessory assembly interface, the fixed accessory interface comprising a rail of Picatinny type.

6. The machine gun as claimed in claim 1, comprising a system of connecting rods actuating the non-return ratchet, incorporated in a frame or in the cover to push the belt to a loading position when the cover is closed.

7. The machine gun as claimed in claim 1, comprising a protruding inclined surface on an inner face of the cover or of a frame actuating a mobile part on a complementary inner face of the feed channel, said mobile part having a movement parallel to a movement of the belt and making it possible to adjust a position thereof during a closure movement of the cover.

8. The machine gun as claimed in claim 1, comprising a feed mechanism by the belt, the feed mechanism comprising a mechanism for ejecting a last two links of said belt.

9. The machine gun as claimed in claim 1, comprising a main slip surface for the belt of ammunition, lateral faces guiding, in use, the belt of ammunition and one or more holding surfaces for the belt of ammunition positioned at a top edge of the lateral faces, said one or more holding surfaces facing the main slip surface and said one or more holding surfaces being open, so as to allow an introduction of the belt of ammunition.

10. The machine gun as claimed in claim 1, comprising a frame body having an essentially tubular geometry.