A mechanism embodying the invention includes a feed box or magazine adapted to be readily attached to or removed from an automatic machine gun, especially an automatic machine gun of the Browning type, and the invention relates more particularly to a magazine of the type adapted to contain a cartridge feed belt which is withdrawn therefrom by means of the mechanism of the gun.

One of the objects of the invention is to provide a magazine of the type described having an opening therein which is located between two belt containing portions thereof and which is of such size as to permit the convenient sighting of the gun therethrough.

Another object of the invention is to provide a magazine having means thereon normally serving to hold the cartridge belt against outward movement but which is nevertheless adapted to be automatically released to permit free movement of the belt when the magazine is in normal position upon the gun.

A still further object of the invention is to provide in combination with the magazine means carried by the gun and forming the guide channel extending laterally from an exit opening in the magazine to the entrance end of the feed channel in the gun and to provide means associated with the guide channel for assisting the movement of the cartridge belt therethrough.

Still another object of the invention is to provide a construction adapted to facilitate the movement of the magazine out of its normal position in order to permit access to the feed mechanism of the gun in case of jamming. In accordance with this phase of the invention the upper member forming the forementioned guide channel is made movable preferably being connected to move automatically upward when the magazine is moved upward.

A still further object of the invention is to provide improved mechanism for guiding the magazine into its normal assembled position on the gun and for controlling the said magazine after it is assembled with the gun.

Another object of the invention is to provide in combination with a machine gun a magazine mechanism so constructed as to utilize for the partial support thereof the longitudinal pin at the entrance to the feed channel of the gun which pin primarily serves for supporting the pawl which prevents movement of a cartridge belt backward out of the feed channel.

Still further objects of the invention will be apparent from the following specification and claims.

In the accompanying drawings we have shown the embodiment of the invention which we now deem preferable but it will be understood that the drawings are intended for illustrative purposes only and are not to be construed as defining the limits of the scope of the invention, the claims forming a part of this specification being relied upon for that purpose.

Of the drawings:

Figure 1 is a perspective view taken from the rear and showing a magazine and the adjacent portion of a gun, the magazine being in the position which it assumes when about to be engaged with the guideways on the gun.

Figure 2 is a perspective view taken from the left, this view showing the left end of the magazine and showing the gun as viewed in the direction of the arrow in Figure 1.

Figure 3 is a transverse vertical sectional view through the magazine and through the gun at the feed channel thereof, the magazine being shown in the position which it assumes just before reaching its final assembled position on the gun.

Figure 4 is a view similar to Figure 3 but showing the magazine in its final assembled position on the gun and showing the cartridge belt in the position to which it ordinarily moves by gravity as soon as the magazine is in place.

Figure 5 is a fragmentary view similar to Figure 4 but showing the end of the cartridge belt advanced into the feed mechanism of the gun.

Figure 6 is a fragmentary horizontal sectional view taken along the line 6-6 of Figure 4, the cartridge belt being omitted.

Figure 7 is a vertical longitudinal sectional view taken along the line 7-7 of Figure 4, the cartridge belt being omitted for the sake of simplicity of illustration.

Figure 8 is a view similar to Figure 7 but showing the cover of the gun together with the
magazine swung upward and forward to give access to the feed mechanism of the gun.

Fig. 9 is a perspective view taken from a point above and at the rear of the gun, this view showing the parts in the relative positions in which they appear in Fig. 8.

Referring to the drawings, 1 represents the box constituting the major portion of the magazine, this box being adapted to contain a cartridge feed belt as already stated and being adapted to be mounted on a gun at the top thereof. We have shown a metallic belt A of the disintegrating type, but the invention is not limited to use with such a belt. As concerns some of the features of the invention, the exact shape of the box is not essential and I have illustrated a generally rectangular box which, when in position on the gun, projects laterally at both sides thereof.

In accordance with one phase of the invention the box, whether rectangular in shape or whether shaped otherwise, is provided with a relatively large opening extending from front to rear thereof and located between two cartridge containing portions thereof. The purpose of the opening in the box is to permit the sighting of the gun in the usual manner without the necessity for providing highly elevated sights which are objectionable. A magazine embodying the present invention may be used upon combat aeroplanes and for this class of service it is desirable to provide a relatively wide sighting range in order that the gun may be trained a considerable distance in advance of an opposing aeroplane along the path of movement thereof. Obviously in order to permit the gun to be used as described, the sighting opening in the box must be relatively wide in order not to obstruct the view of the gunner.

When the box is generally rectangular in form, as shown, the sighting aperture preferably takes the form of a channel extending downward from the top of the magazine and which is preferably located at the center thereof so as to be vertically above the gun when the magazine is in place. It will be observed that the sighting aperture 2 divides the magazine into two main cartridge containing sections or portions 3 and 4 between which the opening is located. It will further be observed, particularly from an inspection of Fig. 3, that the sighting opening 2 terminates above the bottom of the box so as to provide a transverse passageway beneath it from the section 3 to the section 4.

The box may be and preferably is formed of sheet metal but for the sake of simplicity of illustration we have avoided any attempt to show the details of the joints at the corners and elsewhere as these may be varied as desired and may be in accordance with any usual or preferred practice. When the box is formed with a sighting opening 2 as shown there are two separate covers 5 and 6 for the two main portions 3 and 4 of the box, these covers being hinged preferably at the front as shown at 7, 7 and being provided with spring latches 8, 8 by means of which they may be held in closed positions. A suitable handle is provided, this preferably being a leather handle 9 connected with the two covers 5 and 6 by means of lugs as shown at 9a, 9a.

Means are provided which form a narrow passageway for the cartridge belt between the two main side portions 3 and 4 thereof in order to prevent any bodily movement of the belt en masse from one side of the magazine to the other. When there is a sighting opening such as 2 one wall of the opening such as 10 may be utilized to form one wall of the restricted passageway, means such as a partition 11 being provided to form the other wall of the said passageway. Preferably a corner guide element 11a is provided to guide the front end of the belt when the magazine is being loaded. It will be seen that a vertical passageway 12 is formed between the walls 10 and 11 this passageway being of such a size as to permit the movement therethrough of only a single strand of the cartridge belt. From an inspection of the drawings it will be obvious that the wall 10 and 11 forming the passageway 12 serve to positively prevent any bodily movement of the belt from one side of the magazine to the other even though the magazine should be turned as much as 90 degrees from the horizontal. Movement from one side to the other can take place only by the passage of a single strand of the belt through the restricted passageway.

At one side of the magazine from which the belt is fed to the gun, ordinarily the left-hand side, there is preferably provided a guide channel 13. This channel is preferably formed by the left-hand outer wall 14 of the box and by a partition 15 suitably spaced from the said wall. The guide channel terminates in an exit opening at 16 through which the cartridge belt may pass out of the magazine. For a purpose to be explained, the walls 14 and 15 have then lower end portions curved to the right as shown, the said exit opening 16 thus facing toward the gun.

Preferably a stop is provided which is normally so located as to engage one of the cartridges of the cartridge belt to prevent the forward end of the belt from advancing through the guide channel 13 and out of the exit opening 16. As illustrated, particularly in Fig. 6, the said stop is in the form of a pawl 17 which is pivotally mounted between two angle bars 18, 18 secured to the partition 15. The pawl is held in its operative position by means of a spring 19 as shown in Fig. 3. In order that the pawl 17 may be released to permit the outward movement of the belt when required, I provide a suitable releasing
member which serves to move the pawl to its inoperative position as shown in Fig. 4. Preferably the pawl operating member is so constructed and arranged as to be engaged by an element attached to the gun when the magazine reaches its final operative position on the gun. The pawl operating element is illustrated at 20, this element being pivotally mounted between the said angle bars 18, 18.

Fig. 4 shows the element 20 engaged by a member carried by the gun, so that the pawl 17 has been moved to its inoperative position. Thus the cartridge belt has been released for free movement out of the magazine.

Preferably in order to facilitate the movement of the cartridge belt through the magazine horizontal guide rollers are provided. One roller 21 is provided at the top of the partition 11 and at the entrance to the narrow passageway 12. Two other guide rollers 22, 22 are mounted adjacent the corners of the sighting aperture 2. A fourth guide roller 23 is mounted near the top of the partition 15 and at the entrance to the guide channel 13. As shown by dotted lines in Fig. 7 each roller preferably comprises a tube 24 with bushings 25, 25 therein. Each roller is mounted upon a bearing pin 26 extending between the front and back walls of the box.

Initially holding the magazine the belt A is first arranged in layers in the right-hand portion 3 as clearly shown in Fig. 3. When the right-hand portion 3 has been filled the forward end of the belt is dropped downward through the passageway 12, and said forward end engaging the guide element 11 and passing far enough into the portion 4 to permit its being reached by the hand of the operator. The slack portion of the belt is then pulled through the passageway 12 and is arranged in layers in the left-hand portion 4 of the magazine as also clearly shown in Fig. 3. Finally the forward end portion of the magazine is dropped downward through the guide channel 13, the pawl operating element 20 being manually engaged to move the pawl 17 backward so as to permit the end of the belt to advance to the position shown. With the end of the belt in the position shown the element 20 is released, thus permitting the pawl 17 to engage the belt and prevent further outward movement. In case the belt has been accidentally advanced too far it may be pushed back into the box. A guide element 14 prevents any jamming at the top of the box when the belt is moved inward. The magazine when loaded as described is ready to be assembled upon a gun.

In accordance with the invention the gun with which the magazine is to be used has certain additional elements mounted thereon. These elements are preferably entirely additional to the gun, involving little or no change in the gun structure itself. The gun illustrated in the drawings is substantially the same as that shown in the Browning patent for automatic machine guns 1,293,021 dated Feb. 4, 1919, but it is to be understood that the invention is not limited to use with this particular gun. As illustrated the gun comprises a breech casing 27, a barrel 28, preferably surrounded by a barrel casing 29. The breech casing 27 is provided with a cover 30, this cover being pivoted for movement about a transverse horizontal axis at 31 and being adapted to be swung upward and forward to expose the cartridge feed channel in the gun and also the cartridge extracting and firing mechanism. The gun has the usual transverse feed slide 32, this slide being provided with a spring pressed pawl 33 which engages the successive cartridges to give the belt a step by step movement from left to right as the gun is fired. A pivoted pawl 34 is provided to prevent any movement of the belt in the reverse direction. This pawl 34 is mounted on a longitudinal pin 34 held in a bracket 34.

In accordance with the present invention the magazine proper is adapted to engage the gun at the top thereof and it is preferably movable vertically downward into its normal assembled position. Preferably as illustrated the magazine is mounted upon the cover 30 so as to be movable upward and forward therewith when the cover is opened to expose the cartridge feed mechanism. The devices for engaging and holding the magazine may be varied to suit different conditions but, as illustrated, I have shown devices which are so constructed as to avoid any changes in the gun structure itself. With a gun structure differing in details the magazine holding devices may be modified and possibly somewhat simplified. As illustrated there is provided a cradle 35 in which the magazine rests. This cradle has a rear flange 36 and at its forward end it is provided with upright channels 37, 37 which brace the edge portions of a guide member 38 which is secured to the gun near the front of the breech casing thereof and which projects vertically upward therefrom. Preferably as shown the guide member 38 is secured to the cover 30 near the front thereof.

The cradle is provided with flanges 39 and 40 at its left and right sides respectively. Preferably the magazine is provided with bevelled lugs 41, 41 which are positioned to engage the flanges 39 and 40 to center the magazine and to prevent lateral movement thereof with respect to the cradle.

For locking the magazine against vertical movement upward away from the cradle there is provided a spring pressed latch 42 which is pivoted at 43 to the left hand channel member 37 and which is adapted to enter a corresponding notch 44 formed in a plate 45 secured to the magazine at the front side thereof. Preferably the position of the latch.
42 is such that it can be readily engaged by the fingers of the gunner when his hand is in the position with respect to the magazine which is illustrated in Fig. 2. The construction of the latch so as to be readily engaged by the hand of the gunner enables the gunner to readily remove the empty magazine with one hand by simply slipping his hand under the handle 9 as shown and releasing the latch 42 with his fingers. In order to guide the cartridge belt from the magazine to the entrance end of the feed channel of the gun we provide means carried by the gun and forming a guide channel 46. The said guide channel means constitutes a part of the complete magazine mechanism which magazine mechanism is preferably supported in part on the before mentioned pin 34. As shown it is the said guide channel means itself which is thus mounted in part on the pin. When the magazine has a guide channel such as 13 the two said guide channels 13 and 46 register with each other when the magazine is in place as shown in Fig. 4. It is for this purpose that the lower end of the channel 13 is curved toward the gun as already described. The lower wall of the guide channel 46 is formed by a plate 47 forming a part of a bracket 48 which is connected to the gun at the left side thereof. The bracket 48 has supporting brackets 48a, 48b engaging the side of the gun. These brackets have inward extending ears which are engaged by the said pin 34. The bracket 48 is provided with upturned flanges 49 and 50 at the front and rear sides thereof respectively, these flanges forming the front and rear walls of the guide channel. Cooperating with the wall 47 of the bracket 48 is a plate 51 which forms the upper wall of the guide channel 46. Preferably the plate 51 constitutes the member on the gun which has already been referred to as serving to engage the pawl operating element 20 to cause the automatic movement of the pawl 17 to its inoperative position. As the magazine is moved downward to the position shown in Fig. 4 the element 20 is moved to withdraw the pawl 17 and release the cartridge belt A which then ordinarily moves by gravity to the position shown in Fig. 4. In order that the forward end of the feed belt may be advanced into operative relationship with the feed mechanism of the gun I provide a suitable manually operable device for advancing the belt beyond the position shown in Fig. 4. This manually operable mechanism preferably is in the form of a slide 52 which is mounted on the bracket 48 so as to be movable longitudinally of the guide channel 46. The slide 52 is operable by means of a knob 53 and it carries a spring pressed pawl 54 which is adapted to engage one of the cartridges of the belt to advance the belt as clearly shown in Fig. 5. By means of the slide 52 and the pawl 54 the belt can be advanced so that the foremost cartridge thereof is in position to be engaged by the feed pawl 33 of the gun.

The slide 52 is normally positioned as shown in Figs. 3 and 4, being held in this position by means of a spring detent 55 shown in Fig. 2. This detent partly enters a hole 56 in the bracket 48. With the slide and the pawl in the positions shown, the pawl 54 engages a plate 57 on the bracket 48 so as to be held out of the path of the cartridge belt thus permitting the belt to move freely downward by gravity as already described. The position of the pawl 54 is such that if the belt should fail for any reason fail to move downward by gravity as described, the said pawl would, upon movement of the slide 52, engage the foremost cartridge of the belt and positively move the belt forward. It will be obvious that even if there should be a complete failure of the belt to move downward automatically it could be forcibly advanced by repeated movements of the slide 52 until it is finally brought into the position shown in Fig. 5. It will be understood that as firing proceeds the belt A is drawn out of the magazine, first, from the left hand portion 4 thereof and then from the right hand portion 3 thereof.

As already explained the magazine is preferably mounted on the pivoted cover 30 of the gun. The magazine is therefore movable upward and forward when the cover is moved upward to expose the feed mechanism of the gun. In order that this upward and forward movement of the magazine may not be interfered with by the portion of the belt located in the guide channel 46 we so construct the parts forming the guide channel that one of the said parts is relatively movable to permit the belt to move out of the channel and thus release the magazine. Preferably we so mount the upper plate 51 that it can be moved so as to permit the belt to move out of the channel as described. Preferably the plate 51 is mounted to move pivotally upward and forward with the cover 30 and with the magazine. Preferably and as illustrated the plate 51 is provided with an upturned flange 53 which is connected by riveting or otherwise to the downward extending flange 39 at the left hand side of the cradle 35. As illustrated an opening 39 is formed in the flange 53 and also in the inner portion of the plate 51, this opening being for the purpose of providing clearance for the feed slide 32 of the gun. The front edge of the plate 51 is beveled as shown at 51' in Figs. 1 and 9 in order to permit it to clear the belt when in the raised position.

Figs. 8 and 9 show the relative positions of the parts when the cover has been opened to expose the feed mechanism. It will be observed, particularly in Fig. 9, that the por
tion of the belt normally located in the feed channel 46 has been raised out of the channel and slightly twisted, thus compensating for the upward and forward movement of the feed mechanism and the forward end of the belt are entirely exposed so that the gunner can do whatever is necessary to clear the gun and make ready for resumed firing.

Upon closing the cover 30 the magazine is returned to its normal position and at the same time the plate 51 is returned to its normal position, thus bringing the feed belt back into its proper position in the channel 46. In order to guide the belt downward into the channel there is preferably provided a plate 50' secured to the flange 50 of the bracket 48. This plate prevents any undue rearward movement of the belt as it moves downward.

If firing is to be discontinued before the feed belt is entirely used, the forward end of the belt can be released from the gun, upon raising the cover 30 and the magazine as already described. With the magazine thus tipped forward it may be moved forward and upward away from the cradle, the latch 42 being first released. It will be noted that as soon as the magazine is moved away from the cradle and away from the plate 51, the pawl 47 automatically engages the belt A to prevent any further withdrawal thereof from the magazine.

With a gun of the particular design illustrated the lower forward corner of the feed box 1 engages the portion 60 of the gun when the cover is open, thus raising the cradle and the magazine away from the cover, as illustrated clearly in Fig. 8. Upon the return of the cover to its normal position the cradle and magazine would ordinarily return by gravity to their normal positions as shown in Fig. 7. However, in order to positively ensure the return to normal positions we prefer to provide on the bracket 48 an extension 61 and to provide on the cradle 35 a pin 62. If the cradle and magazine should fail to move downward by gravity upon the return of the cover 30 to its closed position, the pin 62 would engage the extension 61 and would positively force the cradle and magazine downward as described. The pin 62 has the further function of limiting the upward movement of the cradle along the guide 38. Without a stop means such as the pin 62 the cradle might under some conditions be removed from the gun with the magazine.

What we claim is:

1. For an automatic machine gun having a transverse feed channel therethrough for a cartridge belt, a cartridge magazine adapted to engage the gun at the top thereof and comprising in combination a box adapted to contain a cartridge feed belt and having a central longitudinal aperture located directly between two belt containing portions thereof and vertically above the gun when the magazine is in operative position, the bottom of the said aperture being relatively close to the gun and the width of the aperture being sufficient to permit convenient sighting therethrough, means whereby the box may be held in operative relation to the gun, and means carried by the box at one side thereof forming a guide channel for the belt operatively associable with the said feed channel of the gun.

2. For an automatic machine gun having a transverse feed channel therethrough for a cartridge belt, a cartridge magazine adapted to engage the gun at the top thereof and comprising in combination a generally rectangular box adapted to contain a cartridge feed belt and having a central longitudinal aperture therein extending downward from the top thereof and located directly between two belt containing portions and vertically above the gun when the magazine is in operative position, the bottom of the said aperture being relatively close to the gun and the width of the aperture being sufficient to permit convenient sighting therethrough, means whereby the box may be held in operative relation to the gun, and means carried by the box at one side thereof forming a guide channel for the belt operatively associable with the said feed channel of the gun.

3. For an automatic machine gun having a transverse feed channel therethrough for a cartridge belt, a cartridge magazine adapted to engage the gun at the top thereof and comprising in combination a generally rectangular box adapted to contain a cartridge feed belt and having a central longitudinal aperture therein extending downward from the top thereof and located directly between two belt containing portions and vertically above the gun when the magazine is in operative position, the bottom of the said aperture being relatively close to the gun and the width of the aperture being sufficient to permit convenient sighting therethrough, means whereby the box may be held in operative relation to the gun, means within the box at one side of the aperture and cooperating with the corresponding side wall of the aperture to form a restricted passageway for the movement of the belt from the said side of the box to the other side, and means carried by the box at the last said other side thereof forming a guide channel for the belt operatively associable with the said feed channel of the gun.

4. For an automatic machine gun having a transverse feed channel therethrough for a cartridge belt, a cartridge magazine adapted to engage the gun at the top thereof and comprising in combination a generally rectangular box adapted to contain a cartridge feed belt and having a central longitudinal aperture therein extending downward from the
top thereof and located directly between two belt containing portions and vertically above the gun when the magazine is in operative position, the bottom of the said aperture being relatively close to the gun and the width of the aperture being sufficient to permit convenient sighting therethrough, means whereby the box may be held in operative relation to the gun, means within the box at one side of the aperture and cooperating with the corresponding side wall of the aperture to form a restricted passageway for the movement of the belt from the said side of the box to the other side, means carried by the box at the last said other side thereof forming a guide channel for the belt opera-tively associated with the said feed channel of the gun, and guide rollers in the box adjacent the entrance to the said passageway and the said channel and adjacent the corners of the sight-ing aperture.

5. For an automatic machine gun having a transverse feed channel therethrough for a cartridge belt, a cartridge magazine adapted to engage the gun at the top thereof and movable downward into operative position, the said magazine comprising in combination a box adapted to contain a cartridge feed belt and constructed to project laterally beyond the gun at least at the side thereof corresponding to the entrance end of the feed channel, means carried by the box and forming a guide channel adjacent the last said side thereof and communicating with the interior thereof, a pawl normally projecting into the said guide channel for preventing outward movement of a feed belt therethrough, and means for automatically moving the pawl out of its normal belt engaging position upon the movement of the magazine downward into operative position as aforesaid.

6. For an automatic machine gun having a transverse feed channel therethrough for a cartridge belt, a cartridge magazine adapted to engage the gun at the top thereof and movable downward into operative position thereon, the said magazine comprising in combination a box adapted to contain a cartridge feed belt and constructed to project laterally beyond the gun at least at the side thereof corresponding to the entrance end of the feed channel, means carried by the box and forming a vertical guide channel adjacent the last said side thereof and communicating with the interior thereof, a stop normally projecting into the said vertical guide channel for preventing outward movement of a feed belt therethrough, and means for automatically moving the stop out of its normal belt engaging position upon the movement of the magazine downward into operative position as aforesaid.

7. For an automatic machine gun having a transverse feed channel therethrough for a cartridge belt, a cartridge magazine adapted to engage the gun at the top thereof and movable downward into operative position, the said magazine comprising in combination a box adapted to contain a cartridge feed belt and constructed to project laterally beyond the gun at least at the side thereof corresponding to the entrance end of the feed channel, means carried by the box and forming a guide channel adjacent the last said side thereof and communicating with the interior thereof, a stop normally projecting into the said guide channel for preventing outward movement of a feed belt therethrough, and an element movably mounted upon the box and connected with the stop, the said element being positioned to be moved by the gun upon the movement of the magazine downward into operative position as aforesaid and serving upon being so moved to automatically move the stop out of its normal belt engaging position.

8. For an automatic machine gun having a transverse feed channel therethrough for a cartridge belt, a cartridge magazine adapted to engage the gun at the top thereof and movable downward into operative position thereon, the said magazine comprising in combination a box adapted to contain a cartridge feed belt and constructed to project laterally beyond the gun at least at the side thereof corresponding to the entrance end of the feed channel, means carried by the box and forming a vertical guide channel adjacent the last said side thereof and communicating with the interior thereof, a pivoted pawl normally projecting into the said vertical guide channel for preventing outward movement of a feed belt therethrough, and an element pivotally mounted upon the box and connected with the pawl, the said element being positioned to be moved by the gun upon the movement of the magazine downward into operative position as aforesaid and serving upon being so moved to automatically move the pawl out of its normal belt engaging position.

9. The combination with an automatic machine gun having a transverse feed channel therethrough for a cartridge belt, of a cartridge magazine box normally detachably mounted on the gun at the top thereof, the said box being adapted to contain a cartridge feed belt and being provided with a guide channel for the belt at the side corresponding to the entrance end of the feed channel, means carried by the gun independently of the magazine and forming a laterally extending guide channel registering with the feed channel of the gun and registering with the said guide channel of the magazine when the magazine is in operative position, a pawl normally projecting into the said guide channel of the magazine for preventing outward movement of a feed belt therethrough, and means for automatically moving the pawl out of its normal belt engaging position upon
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10. The combination with an automatic machine gun having a transverse feed channel therethrough for a cartridge belt, of means carried directly by the gun and forming a laterally extending guide channel registering with the feed channel of the magazine when the magazine is in operative position, and means carried by the gun and movable longitudinally of the said guide channel for engaging and moving a cartridge belt in the said channel.

11. The combination with an automatic machine gun having a transverse feed channel therethrough for a cartridge belt, of means carried directly by the gun and forming a laterally extending guide channel registering with the said feed channel and adapted to register with a companion guide channel of a cartridge magazine when the magazine is in operative position, a slide carried by the gun and movable longitudinally of the said guide channel, a spring pressed pawl on the slide adapted to project into the channel to engage and move a cartridge belt therein, and means for holding the pawl out of operative position when the slide is in its outermost position.

12. The combination with an automatic machine gun having a transverse feed channel therethrough for a cartridge belt, of a cartridge magazine box normally detachably mounted on the gun at the top thereof, the said box being adapted to contain a cartridge feed belt and being provided with a guide channel for the belt at the side corresponding to the entrance end of the feed channel, means carried by the gun independently of the magazine and forming a laterally extending guide channel registering with the feed channel of the magazine and registering with the said guide channel of the magazine when the magazine is in operative position, and means carried by the gun and movable longitudinally of the said guide channel on the gun for engaging and moving a cartridge belt in the said channel.

13. The combination with an automatic machine gun having a transverse feed channel therethrough for a cartridge belt, of a cartridge magazine box normally detachably mounted on the gun at the top thereof, the said box being adapted to contain a cartridge feed belt and being provided with a guide channel for the belt at the side corresponding to the entrance end of the feed channel, means carried by the gun independently of the magazine and forming a laterally extending guide channel registering with the feed channel of the gun and registering with the said guide channel of the magazine when the magazine is in operative position, and means carried by the gun and movable longitudinally of the said guide channel on the gun for engaging and moving a cartridge belt in the said channel.
with the feed channel of the gun and communicating with the magazine when the magazine is in operative position, the said means including a plate forming the upper wall of the guide channel and mounted to be movable upward.

18. The combination with an automatic machine gun having a transverse feed channel therethrough for a cartridge belt, of a cartridge magazine box normally adapted to be detachably mounted on the gun at the top thereof, the said box being adapted to contain a cartridge feed belt, connecting means between the box and the gun permitting movement of the box relatively to the gun about a transverse horizontal axis, and means carried by the gun independently of the magazine and forming a guide channel registering with the feed channel of the gun and communicating with the magazine when the magazine is in operative position, the said means including a plate forming the upper wall of the guide channel and pivoted for upward movement about a transverse horizontal axis simultaneously with the pivotal movement of the box.

19. The combination with an automatic machine gun having a transverse feed channel therethrough for a cartridge belt and having a cover pivoted for upward movement about a transverse horizontal axis, of a cartridge magazine box normally detachably mounted on the gun at the top thereof so as to be movable therewith, the said box being adapted to contain a cartridge feed belt, and means forming a guide channel for the belt communicating at one end with the box and extending laterally and normally registering with the feed channel of the gun, a part of the last said means being movable to permit the belt to move out of the guide channel and thereby permit the cover and magazine to be moved upward about the said axis.

20. The combination with an automatic machine gun having a transverse feed channel therethrough for a cartridge belt and having a cover pivoted for upward movement about a transverse horizontal axis, of a cartridge magazine box normally detachably mounted on the gun at the top thereof so as to be movable therewith, the said box being adapted to contain a cartridge feed belt and being provided with a guide channel for the belt at the side corresponding to the entrance end of the feed channel, and means carried by the gun independently of the magazine and forming a guide channel registering with the feed channel of the gun and registering with the said guide channel of the magazine when the magazine is in operative position, the said means including a plate forming the upper wall of the guide channel and pivoted for upward movement about a transverse horizontal axis.

21. The combination with an automatic machine gun having a transverse feed channel therethrough for a cartridge belt, of a normally vertical guide secured to the gun near the front of the breech casing thereof, a cradle vertically movable along the said guide, a cartridge magazine box normally detachably mounted on the cradle so as to be movable therewith, the said box being adapted to contain a cartridge feed belt, and means forming a guide channel for the belt communicating at one end with the box and extending laterally and normally registering with the feed channel of the gun.

22. The combination with an automatic machine gun having a transverse feed channel therethrough for a cartridge belt and having a cover pivoted for upward movement about a transverse horizontal axis, of a normally vertical guide secured to the cover near the front thereof, a cradle vertically movable along, the said guide, a cartridge magazine box normally detachably mounted on the cradle so as to be movable therewith, the said box being adapted to contain a cartridge feed belt, and means forming a guide channel for the belt communicating at one end with the box and extending laterally and normally registering with the feed channel of the gun.

23. The combination with an automatic machine gun having a transverse feed channel therethrough for a cartridge belt and having a cover pivoted for upward movement about a transverse horizontal axis, of a normally vertical guide secured to the cover near the front thereof, a cradle vertically movable along the said guide, a cartridge magazine box normally detachably mounted on the cradle so as to be movable therewith, the said box being adapted to contain a cartridge feed belt and the said box engaging a portion of the gun so that the box and cradle are moved relatively upward as the cover is raised, means forming a guide channel for the belt communicating at one end with the box and extending laterally and normally registering with the feed channel of the gun, and means carried respectively by the cradle and by the gun independently of the cradle for moving the box and cradle downward along the guide as the cover and the parts thereon are lowered.

24. The combination with an automatic machine gun having a transverse feed channel therethrough for a cartridge belt and having a cover pivoted for upward movement about a transverse horizontal axis, of a normally vertical guide secured to the cover near the front thereof, a cradle vertically movable along the said guide, a cartridge magazine box normally detachably mounted on the cradle so as to be movable therewith, the said box being adapted to contain a cartridge feed belt and means carried by the gun independently of the magazine and forming a laterally extending guide channel registering...
with the feed channel of the gun and communicating with the magazine when the magazine is in operative position, the said means including a plate forming the upper wall of the guide channel and carried by the said cradle.

25. An automatic machine gun having a transverse feed channel therethrough for a cartridge belt and also having a longitudinal pin adjacent the entrance end of the feed channel together with a pawl pivotally mounted on the pin and serving to prevent backward movement of a belt in the said channel, in combination with a cartridge magazine box normally detachably mounted on the gun at the top thereof, the said box being adapted to contain a cartridge feed belt and being provided with a guide channel for the belt at the side corresponding to the entrance end of the feed channel, and means carried by the gun independently of the magazine mechanism supported in part by means of the said pin and adapted to feed a cartridge belt to the said feed channel.

26. An automatic machine gun having a transverse feed channel therethrough for a cartridge belt and also having a longitudinal pin adjacent the entrance end of the feed channel together with a pawl pivotally mounted on the pin and serving to prevent backward movement of a belt in the said channel, in combination with a cartridge magazine box normally detachably mounted on the gun at the top thereof, the said box being adapted to contain a cartridge feed belt and being provided with a guide channel for the belt at the side corresponding to the entrance end of the feed channel, and means carried by the gun independently of the magazine mechanism supported in part by means of the said pin and adapted to feed a cartridge belt to the said feed channel.

In testimony whereof we have hereunto set our hands this 6th day of April 1927.

CHRISTIAN PFEIFFER.

FREDERICK T. MOORE.
CERTIFICATE OF CORRECTION.

Patent No. 1,719,126. Granted July 2, 1929, to

CHRISTIAN PFEIFFER ET AL.

It is hereby certified that error appears in the printed specification of the above numbered patent requiring correction as follows: Page 6, line 35, claim 5, for the misspelled word "normally" read "normally", and in line 36, same claim, for "presenting" read "preventing"; same page, line 103, claim 8, for the word "fed" read "feed"; and that the said Letters Patent should be read with these corrections therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 30th day of July, A. D. 1929.

M. J. Moore,
Acting Commissioner of Patents.
CERTIFICATE OF CORRECTION.

Patent No. 1,719,126. Granted July 2, 1929, to

CHRISTIAN PFEIFFER ET AL.

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