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BACK PLATE LATCH FOR MACHINE GUNS

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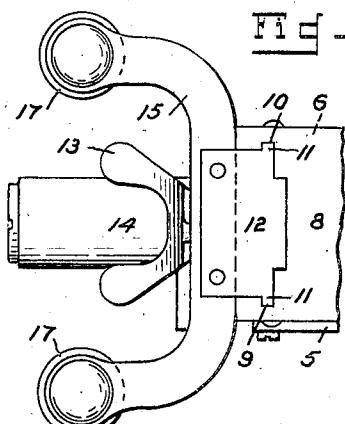


Fig. 1.

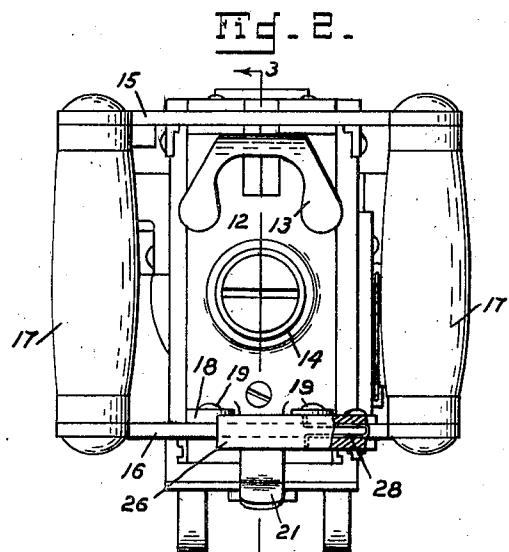


Fig. 2.

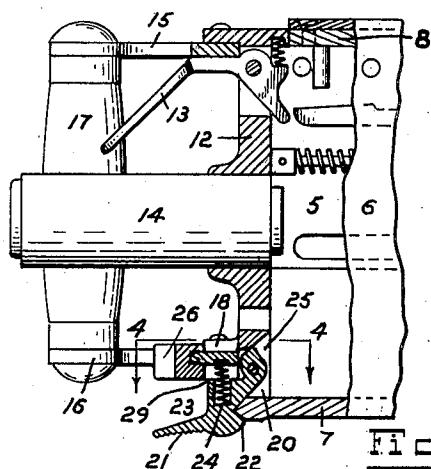


Fig. 3.

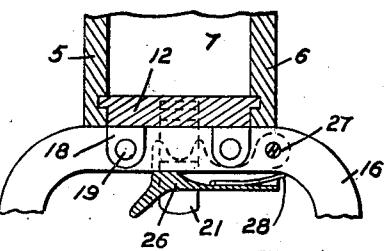
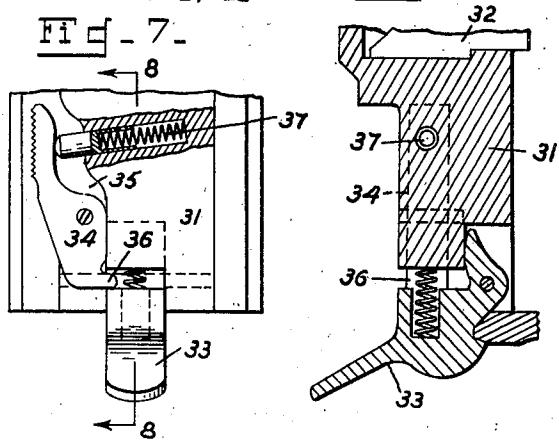


Fig. 4 -



- 1 -

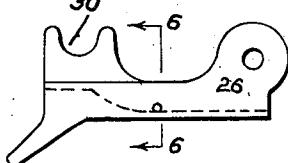
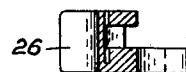


Fig. 6.



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BACK PLATE LATCH FOR MACHINE GUNS

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3 Claims. (Cl. 89—1)

(Granted under the act of March 3, 1883, as amended April 30, 1928; 370 O. G. 757).

The invention described herein may be manufactured and used by or for the Government for governmental purposes, without the payment to me of any royalty thereon.

5 This invention relates to a back plate latch for machine guns.

The purpose of this invention is to provide a back plate for the receiver of a machine gun in which a latch is conveniently mounted in the 10 lower end of the plate and in order that the latch may not be accidentally disengaged from the receiver a locking member is mounted on the back plate and is arranged to normally hold the latch in latching position.

15 To these and other ends, the invention consists in the construction, arrangement and combination of elements described hereinafter and pointed out in the claims forming a part of this specification.

20 A practical embodiment of the invention is illustrated in the accompanying drawing, wherein:

Fig. 1 is a plan view of the breech end of a machine gun.

Fig. 2 is a view in rear elevation.

25 Fig. 3 is a sectional view on the line 3—3 of Fig. 2.

Fig. 4 is a sectional view on the line 3—3 of Fig. 3.

Fig. 5 is a plan view of the locking member.

30 Fig. 6 is a sectional view on the line 6—6 of Fig. 5.

Fig. 7 is a view in rear elevation and partly in section showing the application of the latch to another type of back plate.

35 Fig. 8 is a sectional view on the line 8—8 of Fig. 7.

Referring to Figs. 1 to 6 there is shown a machine gun of the Browning type comprising a receiver formed of side plates 5 and 6, a bottom plate 7 and a top plate 8. The inner walls of the side plates 5 and 6 are formed adjacent their rear ends with vertically disposed grooves, respectively 9 and 10, for receiving opposite tongues 11—11 on a back plate 12 which is assembled by a downward movement and supported by the bottom plate 7. The back plate carries a trigger 13 and a buffer 14 which is disposed longitudinally of the gun and serves in a well known manner to limit recoil movement of the breech bolt (not shown). An upper bar 15 and a lower bar 16 on the back plate carry a pair of hand grips 17—17.

The lower bar 16 is mounted in two laterally spaced sets of vertically spaced ears 18—18 and secured thereto by bolts or rivets 19. The lower

bar is spaced from the lower end of the back plate which has a centrally positioned slot 20 for receiving and pivotally mounting the foot of a latch 21. A nose 22 on the latch is adapted to engage under the rear end of the bottom plate and the latch is normally held in latching position by a helical spring 23 which is seated in a recess in the under side of the bar 16 and in a well 24 formed in the body of the latch. A toe 25 on the foot of the latch is adapted to engage the back plate and limit movement of the latch under influence of the spring when the back plate is out of its final assembled position or is detached from the gun.

The latch is held in engagement with the bottom plate of the receiver by means of a locking member 26 which is arranged to move in a plane transversely of the plane of movement of the latch. The locking member is channeled to embrace the bar 16 and it is mounted at its right end on a pivot pin 27 passing through the bar 16. A spring 28 bearing on the bar and anchored in the locking member normally holds said member against the bar in which position its lower side engages the shoulder 29 of the latch. The lower side of the locking member is formed with a cut-away portion 30 to avoid interference with the helical spring 23.

In operation the locking member must first be moved out of engagement with the latch before the latch can be moved out of engagement with the bottom plate. As clearly shown in Fig. 2 both the latch and locking member may be conveniently grasped by the thumb and forefinger.

In the modification shown in Figs. 7 and 8 the back plate 31 is of a type particularly designed for a fixed gun and is not provided with a trigger and handle grips while the buffer 32 is arranged vertically in the back plate. The latch 33 is substantially identical with the latch 21 and is arranged in a similar manner. A locking member 34, vertically disposed in a slot 35 in the back plate, is pivotally mounted to move transversely of the back plate and in a plane transversely of the plane of movement of the latch. A toe 36 on the lower end of the locking member is normally in engagement with the latch 33 to hold the latter in latching position and the locking member is maintained in this position by a spring 37.

So long as the latch is engaged by the locking member the latch cannot be accidentally disengaged as might occur when the breech end of the gun is depressed and an obstruction such as the knee of the gunner is struck by the latch.

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I claim:

1. In a machine gun, a receiver, a back plate slidably mounted in the receiver by a lowering movement, a bar on the lower part of the back plate, a latch pivotally carried by the back plate underneath the bar and arranged to engage the receiver to hold the back plate in place, a spring between the bar and latch, a channeled locking member pivotally mounted on the bar and movable in a plane transversely of the plane of movement of the latch, and a spring normally holding the locking member in embracing relation with the bar and in engagement with the latch.
2. In a machine gun, a receiver, a back plate slidably mounted in the receiver by a lowering movement, a bar on the lower part of the back plate, a latch pivotally carried by the back plate underneath the bar and arranged to engage the

receiver to hold the back plate in place, a spring between the bar and latch, a locking member pivotally mounted on the bar and movable in a plane transversely of the plane of movement of the latch, and a spring normally holding the locking member in engagement with the latch. 5

3. In a machine gun, a receiver, a back plate slidably mounted in the receiver by a lowering movement, a latch carried in the lower part of the back plate and arranged to engage the receiver to hold the back plate in place, and a locking member carried by the back plate and movable in a plane transversely of the plane of movement of the latch to engage the latch, said latch and locking member mounted for movement towards each other on being disengaged. 10 15

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