

54, counterclockwise into a further disabled position shown in FIG. 6, in which the plunger 68 seats in the notch 70. The engagement between the plunger and the notch restrains the lever against being rotated by the bias of the spring 66, and thus detents the lever in this disabled position.

To provide for an ample arcuate displacement between the unlatched and disabled positions of the lever 51, the surface 55 must have some clearance from the head 26. Thus this surface is inclined downwardly at a small angle to the axis A in both the unlatched and the disabled positions, but in opposite axial directions.

When placed in the disabled, detented position of FIG. 6, the latch lever 51 will remain inoperative and unaffected by movement of the firing pin, until such time as finger pressure is applied to it in a clockwise direction to release the plunger 68 from the notch 70, and thus restore the parts to the normal automatically-operating positions of FIGS. 4 and 5.

In a hunting situation in the field, where a series of 20 shots may be fired, the bolt is cyclically opened to reload the rifle, and reclosed to cock the firing pin for the next shot; and the latch lever automatically cycles between the latched and unlatched positions of FIGS. 4 and 5. Assuming, however, that the hunter wishes to unload the cocked and latched rifle without firing previously-loaded live rounds, he need not release the safety to do so. He merely presses the latch lever 51 into the disabled position of FIG. 6, and opens the bolt with the safety engaged. When he next wishes to reload the rifle, the latch lever should be pressed to release it from the detented disabled condition, so that its normal automatic operation is restored.

The latch lever 51 is preferably positioned near the top of the bolt plug as shown, so that it is readily visible and easily pressed even with a gloved hand, but does not protrude in such a location as to be readily subject to accidental operation by the user's hand carrying the rifle, or by jarring against other objects.

I claim:

1. In a bolt-action firearm of the type having a substantially cylindrical bolt rotatably mounted for movement between open and closed positions; a bolt plug non-rotatably mounted and having threaded connection with said bolt; a firing pin mounted reciprocally in said bolt plug for movement between fired and cocked positions with respect to said bolt; the improved bolt latch mechanism which comprises;

a latch lever having a tooth; said bolt plug being formed with a recess receiving said latch lever; said bolt being formed with a locking notch opening onto an outer peripheral surface thereof at a location radially aligned with said tooth upon rotation of said bolt to said closed position; means mounting said latch lever in said recess for pivotal movement about an axis substantially perpendicular to the longitudinal axis of said cylindrical bolt between a first, latched position in which said tooth is engaged in said locking notch to latch said bolt against rotation with respect to said bolt plug, and a second, unlatched position in which said tooth is disengaged from said locking notch to release said bolt for rotation; spring-biased plunger means mounted in said bolt plug for biasing said latch lever toward said first position;

said latch lever having cam means arranged to project, upon pivotal movement of said latch lever

into said first position, into the path of reciprocation of said firing pin, whereby movement of said firing pin to said fired position normally pivots said latch lever from said first to said second position to unlatch said bolt, and movement of said firing pin to said cocked position normally permits said spring-biased plunger means to pivot said latch lever from said second to said first position to latch said bolt;

said latch lever having a detent notch, and being manually pivotable in said recess to a third, disabled position in which said cam means is withdrawn from the path of reciprocation of said firing pin, said tooth is released from said locking notch and said detent notch engages said plunger means to interfere with rotation of said latch lever from said third position, and thereby render said plunger means inoperative to pivot said latch lever toward said first position thereof.

2. A bolt latch mechanism as recited in claim 1, said latch lever being manually pivotable from said disabled position toward said latched and unlatched positions thereof, by applying pressure sufficient to displace said plunger means from said detent notch.

3. A bolt latch mechanism as recited in claim 1, said latch lever having a face area normally bearing against said plunger means for relative sliding movement as said latch lever is pivoted between said latched and unlatched positions, said detent notch being formed in said face in a location spaced from said bearing area to engage said plunger means in said disabled position of said latch lever.

4. A bolt latch mechanism as recited in claim 1, said latch lever being pivotable: in a first angular direction into said unlatched position; in an opposite angular direction into said latched position; and beyond said unlatched position in said first angular direction into said disabled position.

5. A bolt latch mechanism as recited in claim 4, said firing pin being formed with a head having a peripheral surface cylindrical about the axis of movement of said firing pin; said cam means comprising a cam surface formed on said latch lever; said latch lever being constructed and pivotally mounted so that in said latched position thereof, said cam surface is inclined toward the axis of reciprocation of said firing pin in the direction of movement of said head from said cocked to said fired positions thereof, for sliding engagement by said head surface.

6. A bolt latch mechanism as recited in claim 5, said latch lever being constructed and pivotally mounted so that in said unlatched position thereof, said cam surface slidably engages said head surface and remains inclined to the axis of reciprocation of said firing pin in the direction of movement of said head from said cocked to said fired positions thereof, but at a smaller angle than in said latched position of said latch lever, thereby permitting further pivotal movement of said latch lever in said first angular direction into said disabled position without producing binding interference between said cam surface and said head surface.

7. A bolt latch mechanism as recited in claim 1, said latch lever projecting from said bolt plug recess outwardly of said bolt plug, and having a V-shaped upper surface for manual rocking between said disabled position and said latched and unlatched positions.

