April 30, 1968 A. MILLER ET AL 3,380,183

UPPER HANDGUARD FIXEDLY MOUNTED ON BARREL ASSEMBLY BY BREECHBLOCK GUIDE RODS

Filed March 10, 1967 3 Sheets-Sheet 1

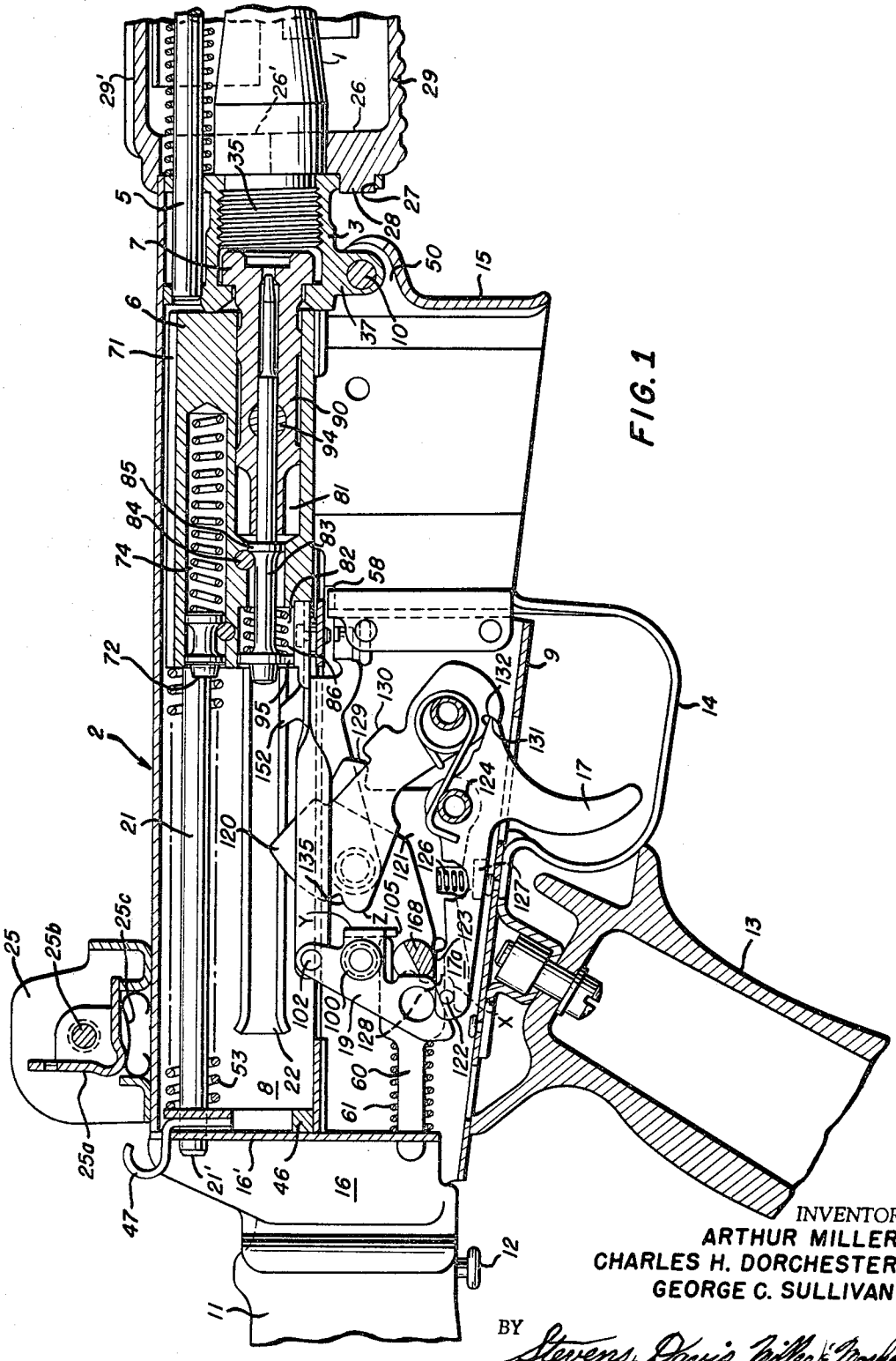

FIG. 1

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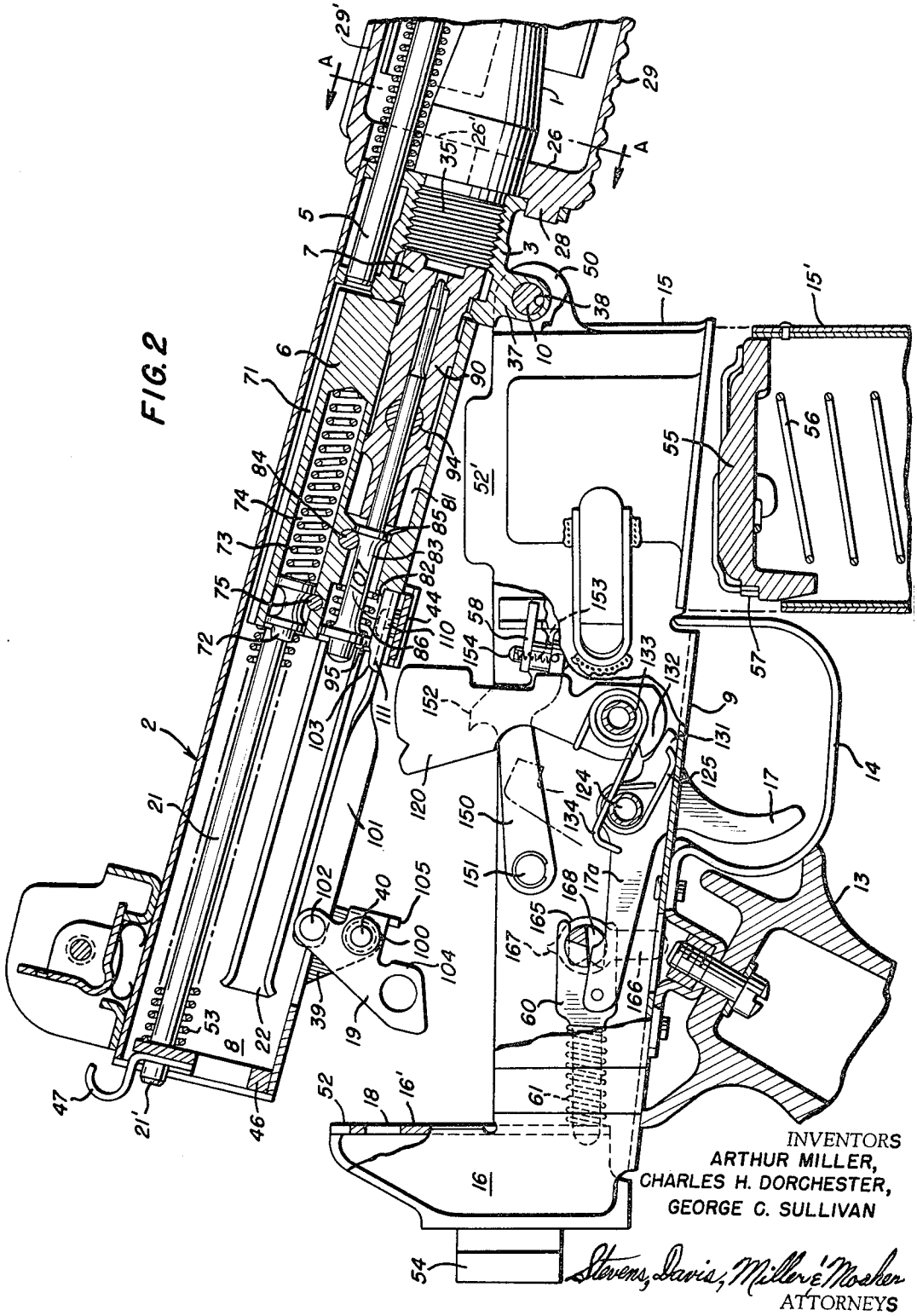
Filed March 10, 1967 3 Sheets-Sheet 2

FIG. 2



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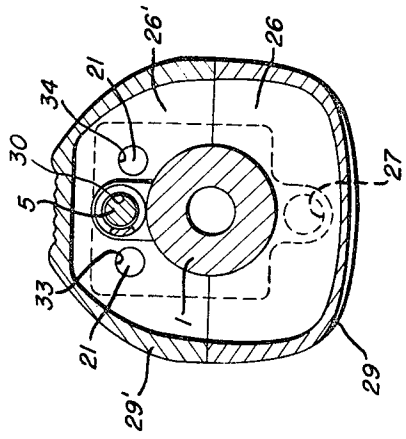

FIG. 4

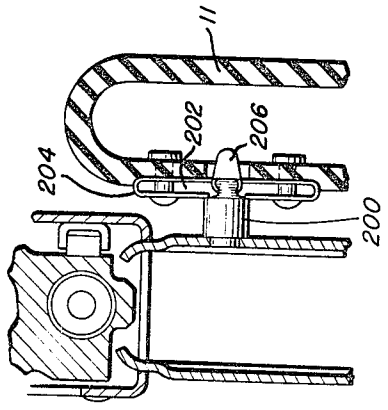

FIG. 3

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3,380,183

UPPER HANDGUARD FIXEDLY MOUNTED ON BARREL ASSEMBLY BY BREECHBLOCK GUIDE RODS

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Continuation-in-part of application Ser. No. 432,198, Feb. 12, 1965, now Patent No. 3,318,192, dated May 9, 1967. This application Mar. 10, 1967, Ser. No. 622,340

3 Claims. (Cl. 42—75)

ABSTRACT OF THE DISCLOSURE

A rifle of the lock action type having a barrel mounting means for mounting the barrel assembly on the receiver assembly, and at least one guide rod mounted in the receiver assembly for guiding the bolt means, the improvement including an apertured member extending from the barrel mounting means and adapted to be engaged by a lug on the handguard, and means carried by the handguard for receiving the guide rod, to fixedly mount the handguard on the barrel assembly.

This is a continuation-in-part application of Serial No. 432,198, filed on Feb. 12, 1965, by Arthur Miller et al., now Patent No. 3,318,192, issued May 9, 1967.

This invention relates to a combat rifle, and more particularly a combat rifle that can be fired in automatic or semi-automatic sequence and maintain maximum performance under adverse combat conditions.

It is well known that firing performance in a rifle can be achieved by many structural arrangements of receiver, bolt, bolt carrier and action, but in all such instances in the prior art, in order to achieve an excellence of performance the parts must be machined to close tolerances. These close tolerances however defeat their purpose under adverse combat conditions. By this is meant, that the precision machining that goes into the forming of the parts and the interfitting of parts in relation to other parts for high performance, requires such close tolerances, that the performance achieved by the rifle formed with such parts is defeated if the rifle is subjected to combat conditions of water, sand, grime, dirt etc.

The machining operations which produce the superior performance of the parts in other rifles not only increases the cost of the parts but also the cost of the machines to produce the parts, thereby rendering such rifles uneconomical in mass production.

It is, therefore, an object of this invention to provide a rifle that can be used in an automatic or semi-automatic firing sequence which will be economical to produce, by reason of the fact that many important parts are made from sheet metal stampings and assembled by sheet metal weldments.

It is another object of this invention to produce a combat rifle that will perform under adverse conditions by reason of the nature of the construction of the parts, employing principally sheet metal parts, and eliminating close tolerances.

Another object of the present invention is to provide an extremely compact weapon having high performance characteristics and a foldable butt stock.

Another object of the present invention is to provide a weapon as described above including means for locking said foldable butt stock in its folded position.

Another object of the present invention is to provide a locked action rifle for automatic and semi-automatic selective firing including guide rods for locking its upper handguard in place.

Another object of the present invention is to provide a locked action rifle for automatic and semi-automatic selective firing wherein said guide rods also lock the rifle's upper receiver to its lower receiver.

It is another object of this invention to provide an automatic and/or semi-automatic combat rifle of simplified construction employing a maximum number of sheet metal parts and sheet metal weldments and a minimum number of machined parts to reduce maintenance and training to a minimum.

It is a further object of this invention to provide a construction and design of an automatic rifle having sheet metal parts which lack close tolerances and therefore will sustain rough handling, dust, dirt, mud, sand and extremes of heat and cold and yet will maintain accuracy under sustained fire.

Other objects and advantages of this invention will become apparent from the following description of the invention taken in conjunction with the accompanying drawings.

In the drawings:

FIGURE 1 constitutes a longitudinal side view partially in section, of the rifle.

FIGURE 2 is a side view partially in section of the action, receiver, and rear portion of the barrel of the rifle.

FIGURE 3 is a bottom view partially in section of the butt stock of the rifle and the means for locking it in its folded position.

FIGURE 4 is a front sectional view of the upper and lower handguard taken on the lines A—A of FIGURE 2.

The automatic rifle shown in FIGURE 1 has the usual components of a barrel **1** and a receiver **2**. The barrel **1** is threaded into a barrel extension **3**. Upon firing, gas from the cylinder assembly actuates the push rod or actuating rod **5** which in turn actuates the bolt carrier **6**. A locking bolt **7** engages lugs in the rearward portion of barrel extension **3** securing the firing chamber in position.

The function and operation of the operating rod and gas cylinder are described in copending application Serial Number 375,256, filed on June 15, 1964, by Arthur Miller, which matured into U.S. Letters Patent No. 3,246,567 on April 19, 1966. The function and operation of the barrel extension and the bolt are the subject matter of Patent Number 3,027,672, which was filed on April 26, 1961, and issued to George C. Sullivan on April 3, 1962.

In FIGURE 1, there is shown an upper receiver **8** and a lower receiver **9**, hinged at **10** so that the portions of the receiver can be separated as shown in FIGURE 2, for disassembly and maintenance. A butt stock **11** is secured to the lower receiver **9**, a catch **12** permits the unlatching and the folding of butt stock **11** against the side of receiver **2**. A knob plunger **200** as shown in FIGURE 3 is positioned on the left hand side of the lower receiver portion **9** and extends into the side of the butt stock **11** through a latch **202** when the butt stock **11** is folded, locking it in its folded position. The latch **202** has a pair of springs **204** which resiliently engage a detent **206** in the knob plunger **202**. Pistol grip **13** is secured to lower receiver **9**. Trigger guard **14**, magazine guide **15** and rear bracket **16** comprise integral components of the lower receiver **9**. Trigger assembly **17**, fire selection cam **168**, hammer **120** and last round stop mechanism **150** are carried by the lower receiver portion **9**. Housed and carried by the upper receiver portion **8** are the automatic sear mechanism **19** and the bolt carrier **6** which moves on a pair of guide rods **21**. Channel **22** is welded to the side of the upper receiver portion **8**.

The parts described above in connection with the gen-

al description of the rifle can be more clearly noted their respective relationship in FIGURE 2 which shows ie upper receiver portion 8 pivoted away from the lower ceiver portion 9.

One of the principal features of upper receiver portion is that it is made of sheet metal, bent and formed into receiver portion. The sighting bracket 25 is also formed f a sheet metal stamping and is shown welded to the ar upper portion of receiver portion 8.

Sight 25*a* is a two position sight formed of sheet metal, ivoted at 25*b*, and biased in one of two positions by pring 25*c*.

The right hand end of the tubular member forming reiver portion 8 is closed by barrel extension 3 which fits ithin the formed sheet metal tubular member 8 and is elded thereto closing the right hand end. An extension 6 of member 3 has an aperture 27 formed therein to ccommodate a locking lug 28 on the rear portion of the wer part of the hand guard 29. Aperture 30 performs ie function of a guide for operating rod 5. As shown FIGURE 4, the upper part of the hand guard 29' as a member 26' connected thereto with apertures 33 nd 34 in which guide rods 21 are positioned to lock the pper part of the hand guard 29' in position. Sleeve 3 is hreaded as shown at 35 to receive the correspondingly hreaded portion of the rear end of barrel 1. Locking ugs are formed on the end opposite the threaded portion f barrel extension sleeve 3 to engage corresponding lockng lugs on the forward end of the bolt in a manner decribed in Patent No. 3,027,672 referred to above. Deending portions 37 have apertures 38 formed therein o accommodate a hinge pin 10 to permit the swinging pper section of the receiver away from the tower section f the receiver.

Sleeve extension 3 forms support for, and completes he right hand end of upper receiver portion 8. Formed vith or attached to the sheet metal construction of reeiver portion 8 are members 39 depending therefrom aving holes 40 to afford a pivot point for support for the utomatic sear mechanism 19.

FIGURE 2 shows the left hand end of upper receiver portion 8 partially closed by guide rod plate 46 having a guide plate rod handle 47 welded at the middle of the op portion thereof. Guide rods 21 extend through openngs in plate 46 and are welded therein to form a welded ssembly of a pair of guide rods 21, plate 46, and handle 47. The guide rods have portions 21'extending through he plate for a purpose that will be described.

The lower portion of the receiver 9 is also a metal tamping, bent and welded to form a sheet metal construction. As will be seen from FIGURES 1 and 2, the heet metal weldment 9 is formed with a portion 15 dapted to receive a magazine 15'. The right hand end of receiving portion 9 is formed with members 50 adapted o receive portions 37 of sleeve extension 3 and form support for pin 10. Portions 52 formed inwardly on the side walls of chamber 15, form an upper limit stop for the magazine chamber. The rear portion of the lower receiver portion 9 is completed by bracket 16 which is in the form of a bent and welded sheet metal assembly to which the sides of the lower receiver assembly 9 are welded. The forward wall of bracket 16 shown in FIGURE 2 as 16', has a pair of apertures 18 through which extend the ends 21' of guide rods 21 and a cut out portion 52 to accommodate handle 47. The upper receiver assembly is pivoted into position with the lower receiver assembly. By pressing guide rod handle 47 forward member 46 will move against springs 53 surrounding the guide rods 21, and the guide rod portions 21' will register with holes 18 and the forward wall 16' of bracket 16. When the guide rod handle 47 is released the guide rod portions 21' will extend through holes 18 and lock the two portions of the receiver in operative position. Brackets 54 extend rearwardly of member 16 to afford a hinge and catch for folding butt stock 11.

Magazine 15' hash a plate 55 biased upwardly by spring 56 to urge the cartridges into position to be carried into the chamber of the rifle. A ledge 57 on the rearward portion of plate 55, engages the last round stop lever 48. The hammer and trigger assembly are mounted in the lower receiver portion.

A safety holder detent 60 for the selective firing safety mechanism extends through forward wall 16' of bracket 16 and is biased by a spring 61 in the forward position.

The bolt carrier 6 is an elongated block adapted to fit within the generally rectangular tubular receiver portion 8, with sufficient clearance on all sides. The bolt carrier 6 is supported entirely within upper receiver portion 8 on rods 21 extending through openings formed therein. The openings formed in said bolt carrier 6 engage rods 21 with a sliding fit. Ribs 71 extend along the top of bolt carrier 6 providing runners. The runners 71 are adapted to ensure clearance between the block and the inside upper wall of receiver portion 8. A shock absorber 72 is mounted in a cavity 74 formed in bolt carrier 6. The shock of the impact of the bolt carrier on plate 46 at the ends of guide rods 21 is absorbed by spring 73. A tubular pin 75 extends through the block of bolt carrier 6 for disassembly purposes. Another pin extends from the right hand side of bolt carrier 6 and rides in track 22 which is welded or otherwise secured to the inner left side wall of receiver portion 8. This pin will be hereinafter referred to as a "track pin." A chamber 81 is formed in the bolt carrier to accommodate the bolt. The rear portion of chamber 81, shown at 82, accommodates a spring 86 to bias firing pin 83. A pin 84 extends through the bolt carrier engaging a flange 85 on the firing pin to retain the firing pin and the entire assembly in place. The pin 84, however, also permits ready removal of the firing pin, spring, bolt, and cam pin for disassembly purposes.

A bolt 90 assembled in cavity 81 is of the type described in Patent No. 3,027,672 and has locking lugs to engage corresponding locking lugs of the sleeve extension 3 on the barrel of the rifle.

The bolt 90 is free to move axially of the cavity 81, and as it moves in cavity 81, it slides on firing pin 83. A cam pin 94 generally cylindrical in shape extends through bolt 90 and outwardly through a cam opening beyond the outside wall of the bolt carrier 6. An aperture is formed in the cam pin 94 through which firing pin 83 extends to hold the bolt and cam pin in assembled relationship. When cam pin 94 is in the right hand end of the cam slot, the bolt is in the unlocked position and cam pin 94 slides with the track pin in track 22, during the rearward motion of bolt carrier 6. Upon the forward motion of bolt carrier 6 the bolt closes the cartridge chamber formed in the barrel and locking lugs of the bolt mesh with locking lugs of the sleeve extension 3. Cam pin 94 is then beyond the forward extent of track 22. Further forward motion of bolt carrier 6 causes cam pin 94 to rotate counter-clockwise which in turn causes a counter-clockwise rotation of the bolt so that locking lugs of the bolt engage and lock with the locking lugs of the extension 3. Clockwise rotation of the locking lugs of the bolt with respect to the lugs of the sleeve extension takes place when the bolt carrier moves rearwardly impelled by operating rod 5. The cam pin 94 is then rotated to a position in alignment with track 22 and remains in track 22 during the complete rearward motion of the bolt carrier 6.

The bolt carrier 6 is milled to provide an extension 95 to engage the hook 103 of the automatic sear as will be described.

The action assembly is secured by a pin extending through the hole in bushing 100 and holes 40 in member 39 forming a part of the upper receiver portion 8. The assembly is therefore secured to and functions with the upper receiver portion 8. Member 19 is a sheet metal stamping bent in a generally U-shaped form so that its side members afford end bearings for bushing 100, and

portion 105 which forms the automatic sear for a trigger release for automatic firing extends between it. A surface 104 that cooperates with the safety or selective firing cam 168 as will be described later is formed on member 19. Automatic firing connecting link 101 is pivoted to 19 at 102, and extends inside of upper receiver portion 8. A headed member 110 is engaged by a slot formed in the forward end of link 101. Link 101 is twisted 90 degrees from a vertical position at the end near pivot 102 to a horizontal position at the end in which the slot is formed. The forward end of link 101 is formed with a vertical portion 111 adjacent the slot. The portion 111 has a ramp portion 107 and a sear portion 103 and slides in a slot in bolt carrier 6. As bolt carrier 6 moves rearwardly, the portion 111 moves along the slot formed in bolt carrier 6. When the rifle is set for full automatic operation, the forward motion of the bolt carrier 6 under the energy stored in springs 53 shown in FIGURE 2 causes projection 95 to engage surface 103 and move the connecting link 101 forward. The sear surface 105 disengages the hammer, which will fire the cartridges in the chamber through firing pin 83.

The trigger 17 is made of a folded metal stamping, and is in effect a bell crank pivoted about pin 124. A spring 125 having one end resting on the bottom of lower receiver assembly 9 biases trigger 17 in a forward position. The surfaces 123 formed on each side of trigger 17 engage safety or selective firing cams to hold trigger 17 in a forward position and prevent actuation of any of the mechanism or movement of the trigger when in the "safe" position.

A trigger disconnect 121 mounted on pivot 124 is positioned between the sides of the trigger 17. A compression spring 126 supported on its lower side by two turned-in portions 127 of the trigger 17 presses against trigger disconnect 121 to bias the trigger disconnect in a clockwise direction with respect to the trigger assembly. A hook portion 129 on the trigger disconnect 121 extends through an opening between the two sides of hammer 120 to engage portion 130 of the hammer to lock the hammer in the down position.

The function of the trigger disconnect 121 is to engage and hold hammer 120 when trigger assembly 17 is in the clockwise position. When trigger 17 is pulled rearwardly, the spring 126 is compressed and disconnect 121 is rotated and held in a clockwise position. Normally hook 129 of disconnect 121 moves freely through the opening in the forward side of hammer 120 when the trigger is in the normal or counter-clockwise position. However, when the trigger is moved rearwardly, hook 129 will latch over portion 130 of hammer 120 and hold it until trigger 17 moves forward taking the sear along pin 122 acting against surface X and hook 129 will release the hammer and engage surfaces 131 and 132. After firing, while the trigger is held in a rear position, the bolt carrier 6 will depress the hammer 120 and the spring 126 will permit hook 129 to engage and hold the portion 130, thus holding the hammer until the trigger is released.

The hammer 120 is formed with a sear surface 132 which engages the sear surface 131, on the trigger, for semi-automatic firing, and is mounted in the lower receiver portion 9 by pin 133 and biased in a clockwise direction by spring 134 as shown in FIGURE 2. A notch formed in the upper portion of the hammer 120 provides a sear surface 135 which cooperates with the portion 105 for automatic firing of the rifle.

The last round stop consists of a lever 150 mounted at a pivot 151 on the side of the lower receiver assembly 9, and has a hook portion 152 which extends upwardly into upper receiver portion 8, and a portion 58 formed on the forward end thereof which extends into and engages or is engaged by the portion 57 of the follower 55 in magazine 15'. A button 154 is urged upwardly by a relatively weak spring 153 which is mounted on lever arm 150 to hold the hook portion 152 out of the path of bolt carrier 6. The lever 150 has a relatively long lever arm from pivot point 151 to the end of member 58; therefore, if the magazine spring is weak, due to the length of the lever arm, a good mechanical advantage will be had after the last round to push hook portion 152 up into the path of travel of bolt carrier 6. Thus, when hook portion 152 is not held downward out of the path of travel of bolt carrier 6 by spring 153, it will engage bolt carrier 6 and hold the bolt carrier in the open position. Button 154 rests against cross-member 44 on the lower side of upper receiver portion 8.

The safety or firing selection lever is mounted on the left hand side of the lower receiver portion 9 as illustrated in dashed lines in FIGURE 2. The lever 165 has a handle 166 and a pointer 167. In the vertical position of the handle with pointer 167 pointing upwardly, the rifle is in the semi-automatic firing condition. When pointer 167 is moved counter-clockwise, the rifle mechanism is in its safe condition; and when the pointer is moved clockwise the rifle mechanism is placed in its automatic condition. The selective firing or the safe condition of the firing mechanism is accomplished by the shaft being milled or formed into a cam 168 throughout its length with various cross sections positioned along its shaft. The various cross sections of the cam shaft either prevent portions of the firing mechanism from operating or permit the actuation of other parts of the firing mechanism by moving into and out of the recesses formed in the cam shaft.

The detent 60 has an end biased by spring 61 to engage one of three notches for the "safe," "semi," or the "auto" position of lever 165.

The member 19 is biased so that sear surface 104 moves counter-clockwise and the automatic sear connecting link 101 is biased toward the left. It the fire selection lever is moved to the automatic position (auto), there will be a cutout portion in cam shaft 168 which will permit surface 104 to move freely in a counter-clockwise direction. This permits automatic sear connection link 101 to move the surface 103 to the left, when it will engage the bolt carrier 6 after the bolt has closed and locked the chamber. This last fractional movement of surface 103 will cause surface 105 to move in a clockwise direction and disengage the surface 135 of hammer 120 releasing the hammer. If the fire selection lever is moved to a semi-automatic or "safe" position, the cam surface on 168 moves surface 104 in a clockwise direction so that surface 103 will not be engaged by the bolt carrier and therefore will be no automatic firing.

As bolt carrier 6 moves rearwardly under the impact from the gas operated push rod 5, the rear portion of bolt carrier 6 presses the upper portion of hammer 120 into the lower receiver portion 9. If the fire selection switch is set for automatic firing, portion 165 of member 19 moves in a counterclockwise direction and engages and stops portion 135 of hammer 120 until it is released by the forward motion of the bolt carrier as described above. If, as described above, the automatic firing is prevented by the position of the fire selection lever, then members 105 and 135 will not engage and the hammer will then be held by the engagement of sear surfaces 131 and 132. If the surface 123 of trigger 17 is held downward by portions of the cam shaft 168 and the fire selection lever 166, it is impossible to move the trigger rearwardly about its pivot and the gun will be in its safe condition.

The *operation* of the rifle is as follows: there are two separate firing systems, one for automatic and one for semi-automatic firing. When the full automatic sear system is removed or damaged the rifle can still be fired in a semi-automatic condition.

Assumed condition of weapon, i.e., bolt closed on an empty chamber, hammer cocked, selective fire lever either on "safe, semi, or auto," then

(1) *On "safe" condition*

By rotating the selective fire lever to the "safe" position:

(a) the automatic sear is cammed out of engagement

osition, i.e., surface **104** is cammed clockwise by the lective fire lever, and

(b) trigger **17** and disconnect **121** are blocked, i.e., igger surface **123** and disconnect surface **128** rest against ie outside diameter of the selective fire lever, thus pre- enting clockwise rotation. Counter-clockwise rotation of ie trigger is prevented by the hammer.

(2) *Semi-automatic or "semi" condition*

Having fed a live round into the chamber while the eapon is on "safe," the selective fire lever is rotated to ie "semi" position,

(a) The automatic sear remains cammed out of its igagement position.

(b) The trigger and disconnect are allowed to rotate lockwise. By pulling on the trigger (clockwise), the ammer is released. With the hammer released by disen- aging surfaces **131** and **132**, further clockwise rotation f the trigger-disconnect assembly is limited by the cut- ut, and contact surfaces **128** and **123**.

The hammer, after impinging upon the firing pin and ischarging the cartridge, is rotated counter-clockwise by ie bolt carrier. Since the time span for the above cycle, e. firing and recocking, is only a small fraction of a sec- nd, the trigger finger of the shooter does not have enough ime to release the trigger, i.e., to allow the trigger spring o rotate the trigger counter-clockwise and thus engage urface **132** with trigger surface **131**. Therefore, the dis- onnect claw **129** is first cammed counter-clockwise by ammer surface **130**, and then snaps over and catches the ammer at **130**.

The trigger, still held by the trigger finger against the utout in the selective fire lever, gradually relaxes, thus ermitting the trigger spring to rotate the trigger and dis- onnect counter-clockwise, the trigger forcing the discon- ect counter-clockwise by means of pin **122** and sur- ace X.

This counter-clockwise rotation is continued until sur- aces **129** and **130** disengage at which time the trigger atches the hammer at **131** and **132** surfaces.

(3) *Full automatic or "auto" condition*

By rotating the selective fire lever to "auto" position:

(a) The cam shaft portion on the selective fire lever locks the disconnect **121** as in "safe" position, i.e., the am shaft portion cams surface **128** of the disconnect ounter-clockwise preventing it from functioning.

(b) The automatic sear is biased counterclockwise by he spring, i.e., assuming the hammer being held by the rigger, the sear will rotate counter-clockwise until sur- ace X contacts radius Z on hammer. The hammer is then eleased by pulling the trigger and the trigger remains pulled" (all the way clockwise), i.e., surfaces **131** and **132** can no longer engage as the hammer is "cocked" by by the return stroke of the bolt carrier.

The hammer (radius Z), in its counter-clockwise rota- ion strikes surface Y on the sear, camming it clockwise (momentarily). Then, as the hammer continues its ounter-clockwise rotation, cutout **135** in the hammer allows the sear spring to snap the sear counter-clockwise nto the cutout and eventually engage surfaces **105** and **135**. In the meantime, the bolt carrier reaches the end of its rearward stroke and glides forward (feeding a new cartridge). The bolt carrier then locks the bolt and strikes surface **103** of the sear extension, releases the hammer by causing the sear to rotate clockwise.

The above cycle is repeated until the magazine is empty or until the trigger is released (and surfaces **131** and **132** engage) in which case the auto-cycle is interrupted.

It is to be understood that vartious changes in the em- bodiment of the invention shown may be made by those skilled in the art without departing from the spirit of the invention as claimed.

What is claimed is:

1. A rifle of the locked action type having a barrel assembly, a receive assembly, bolt means, and at least one guide rod mounted in said receiver assembly for guiding said bolt means; wherein the improvement comprises a handguard carried by said barrel assembly and including means for receiving said guide rod to fixedly mount said handguard on said barrel assembly.

2. A rifle of the locked action type having a barrel assembly, a receiver assembly, barrel mounting means for mounting said barrel assembly on said receiver assembly, bolt means, and at least one guide rod mounted in said receiver assembly for guiding said bolt means, wherein the improvement comprises an apertured member extending from said barrel mounting means, and a handguard carried by said barrel assembly and comprising an upper portion and a lower portion, said upper portion including means for receiving said guide rod to fixedly mount said upper portion on said barrel assembly, and said lower portion including a lug member adapted to engage said apertured member to fixedly mount said lower portion on said barrel assembly.

3. In a rifle of the locked action type, an upper receiver portion, a lower receiver portion comprising a box of a length and width generally coextensive with said upper receiver portion, and an action housed within said upper receiver portion and said lower receiver portion, hinge portions formed on the forward ends of said upper and lower receiver to afford a hinge about a transverse axis, means to mount a barrel provided on the forward end of said upper receiver portion, a pair of guide rods mounted in said upper receiver portion, springs surrounding said guide rods, a bolt carrier member mounted on and guided by said guide rods to move within said upper receiver portion substantially free of the walls of said upper receiver portion, a bolt in said bolt carrier, means to rotate said bolt to lock and unlock said bolt from engagement with means on the rearward end of said barrel, a channel member secured inside said upper receiver portion and extending longitudinally thereof, said means to rotate said bolt including a pin member inserted into said bolt carrier and engaged and guided by said channel member during movement of said bolt carrier, a handguard and means for locking said handguard in position about the barrel of said rifle, said handguard including an upper portion and a lower portion and said means for locking said handguard in position about the barrel of said rifle including a member extending from said barrel mounting means having an aperture therein adapted to receive a lug formed on said lower portion of said handguard, and said means for locking said handguard in position about the barrel of said rifle further including means formed in the upper portion of said handguard for receiving said guide rods.

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