May 25, 1954 D. M. WILLIAMS 2,679,123

TAKEDOWN MECHANISM FOR FIREARMS

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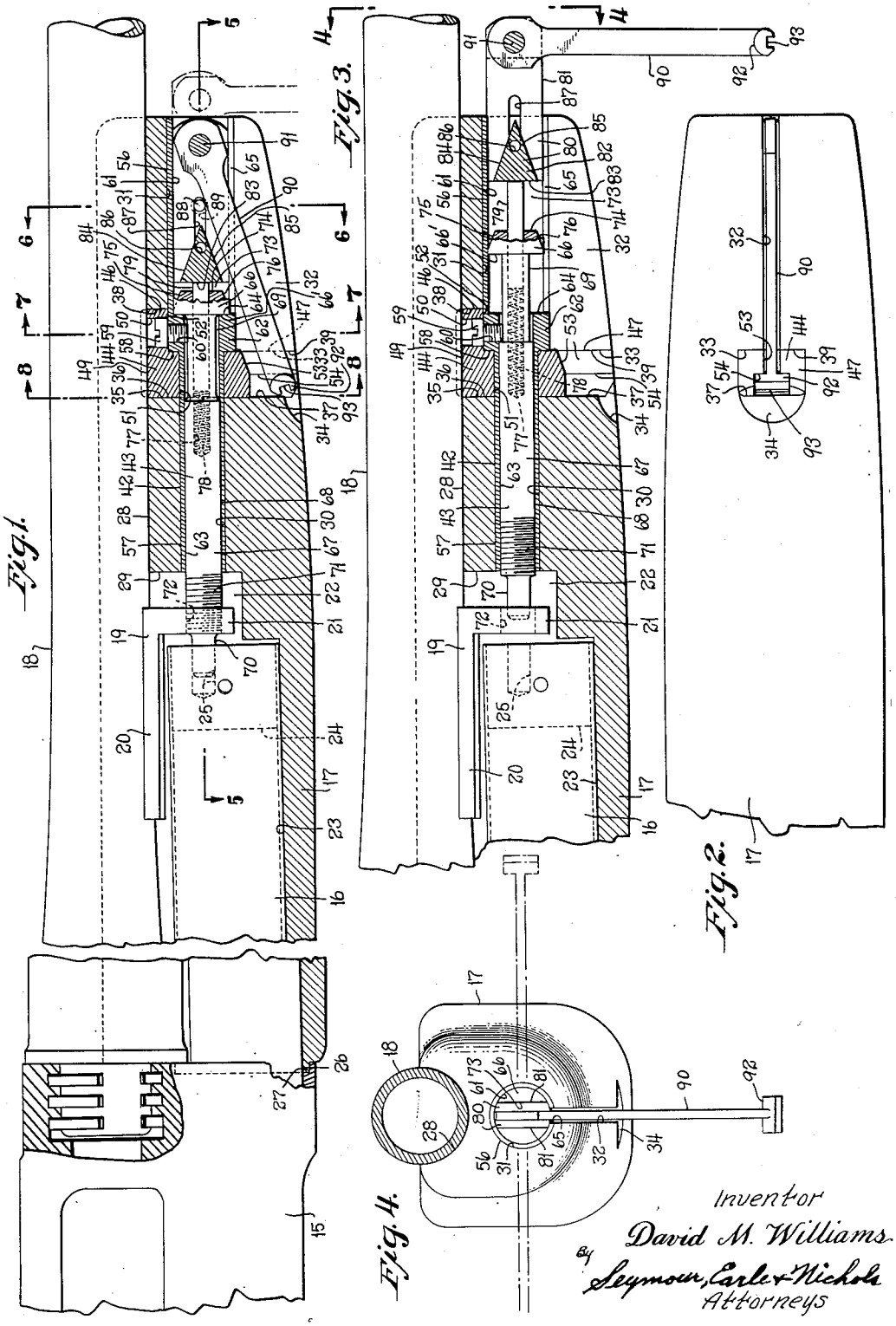


Fig. 1.

Fig. 3.

Fig. 2.

Fig. 4.

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Fig. 5.

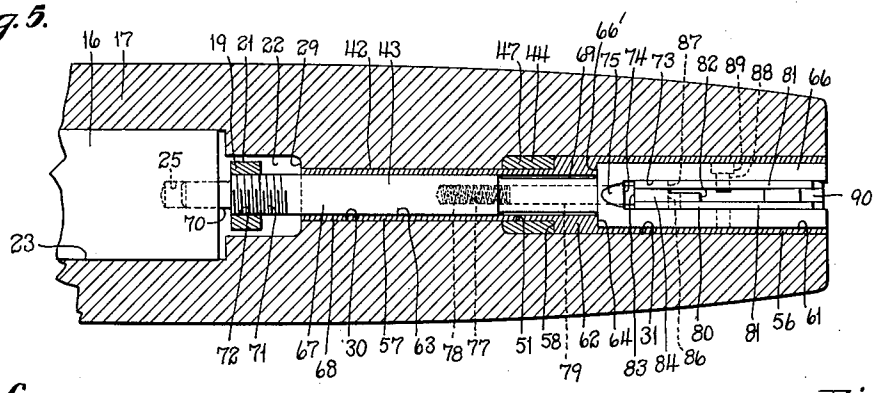


Fig. 6.

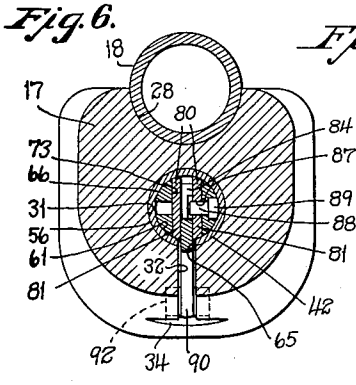


Fig. 7.

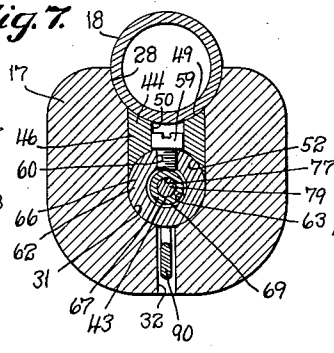


Fig. 8.

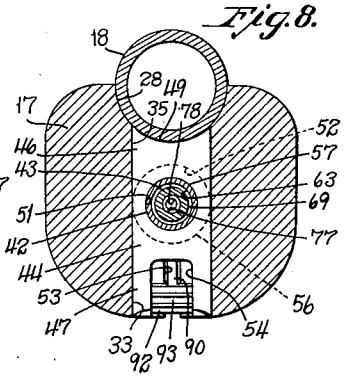


Fig. 9.

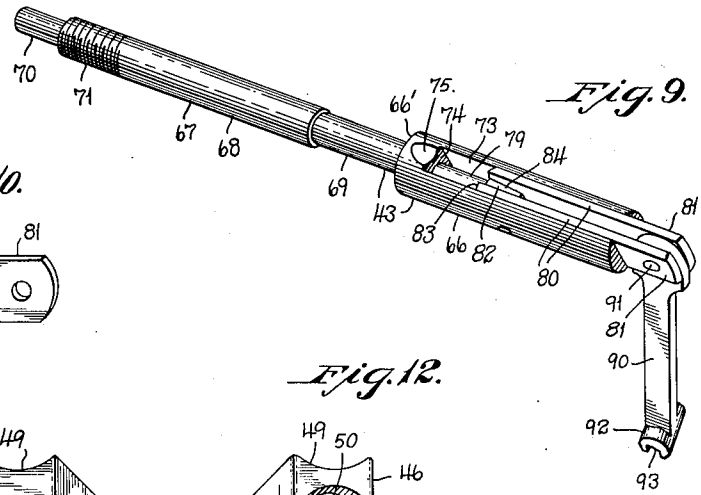


Fig. 10.

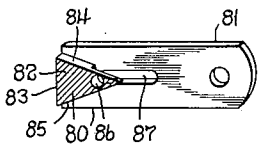


Fig. 12.

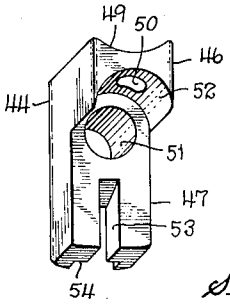
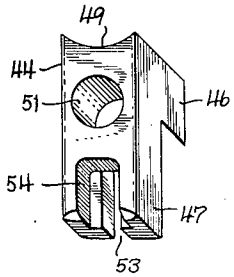


Fig. 11.



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2,679,123

TAKEDOWN MECHANISM FOR FIREARMS

David M. Williams, New Haven, Conn., assignor to Olin Industries, Inc., New Haven, Conn., a corporation of Delaware

Application August 20, 1948, Serial No. 45,243

7 Claims. (Cl. 42—75)

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The present invention relates in general to firearms and more especially to a firearm of the takedown type, that is to say, a firearm in which the frame and barrel are readily separable one from the the other for convenience in packing, shipping and carrying.

An object of the invention is to provide a firearm with superior takedown-means for readily attaching the barrel to the frame of the firearm and detaching it therefrom.

A further object of the invention is to provide a takedown firearm having superior takedown-means for attaching and detaching the barrel to and from the frame of the firearm, the takedown-means being of durable and dependable construction which lends itself to simplicity and facility of operation.

A still further object of the invention is to provide a retractable operating-means for the takedown mechanism of a firearm wherein the operating-means in its normal locked position is retracted into a recess of the fore-end and is resiliently held therein from outward displacement.

With the above and other objects in view, as will appear to those skilled in the art from the present disclosure, this invention includes all features in the said disclosure which are novel over the prior art.

In the accompanying drawings, in which certain modes of carrying out the present invention are shown for illustrative purposes:

Fig. 1 is a broken side elevation of a firearm embodying the improved takedown mechanism of this invention, the fore-end of the firearm including the takedown-means being shown partly in section to demonstrate the relationship between the barrel, fore-end and frame-unit;

Fig. 2 is a fragmentary bottom view of the forward end of the fore-end of Fig. 1;

Fig. 3 is a broken side elevation of the firearm similar to Fig. 1 except that the takedown mechanism is shown disconnected from the barrel locking-lug and the magazine-plug;

Fig. 4 is an end elevation of the firearm in the direction of arrows 4—4 of Fig. 3;

Fig. 5 is a top plan view of the takedown mechanism on section line 5—5 of Fig. 1;

Fig. 6 is an end elevation in section on line 6—6 of Fig. 1;

Fig. 7 is an end elevation on section line 7—7 of Fig. 1;

Fig. 8 is an end elevation on section line 8—8 of Fig. 1;

Fig. 9 is a perspective view of the improved takedown mechanism of the invention;

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Fig. 10 is a perspective view in longitudinal section of the sliding link-member of the takedown mechanism;

Fig. 11 is a perspective view of the locking-block of the takedown mechanism looking toward the rear of the block; and

Fig. 12 is a perspective view of the locking-block of the takedown mechanism looking towards the front of the block.

The particular takedown firearm herein chosen for illustrating the invention, includes two principal units which are separable one from the other to enable the firearm to be more conveniently packed, shipped or carried. The one unit of the firearm may, for convenience of description, be designated as the "frame-unit" and comprises, in the main, the receiver 15, a tubular magazine 16 rigidly secured at its rear end to the forward end of the receiver by a substantially-permanent connection and a fore-end 17. The complementary "barrel-unit" of the firearm comprises, in the main, a barrel 18 having interrupted threads at its read end adapted to be detachably coupled with corresponding interrupted threads of a longitudinal aperture in the front face of the receiver in a manner well known in the art; and a barrel locking-lug indicated generally at 19. The latter is a substantially L-shaped member having a long leg 20 fixedly secured to the underside of the barrel substantially longitudinally thereof, and an apertured short leg 21 extending substantially at right angles to the long leg 20 and adapted to project downwardly from the underside of the barrel, for the purpose hereinafter described.

Referring especially to Fig. 1, it will be noted that when the barrel 18 and the fore-end 17 are assembled on the frame-unit, the short leg 21 is adapted to extend downwardly into a vertical clearance-recess 22 at the forward end of a longitudinal magazine-receiving aperture 23 of the fore-end and immediately in front of the forward end of the tubular magazine. The forward end of the latter is enclosed by a solid plug 24 which is pinned or otherwise fixedly secured therein and provided with a smooth-bored aperture or socket 25. The latter intersects the front face of the plug 24 and extends rearwardly therein substantially parallel with but eccentric to the longitudinal axis of the magazine and constitutes a connecting element of the takedown mechanism, as hereinafter described.

The fore-end 17 is substantially U-shaped in cross section, its rear end being provided with a U-shaped shoulder 26, in cameo, arranged to seat in a recess 27 of the corresponding shape and

dimensions in the front face of the receiver for supporting the rear end of the fore-end, the recess serving as a fixed abutment therefor. The aforesaid magazine-receiving aperture 23 of the fore-end is substantially cylindrical in cross section and extends from the rear end of the fore-end forwardly longitudinally substantially two-thirds of the length thereof to intersect the substantially-vertical clearance-recess 22, the top side of the cylindrical aperture being intersected by the concave bottom of a clearance-groove 28 extending longitudinally throughout the entire length of the fore-end for accommodating the underside of the barrel.

Extending longitudinally through the fore-end from the vertical wall 29 of the clearance-recess 22 to the forward end of the fore-end is a cylindrical aperture 30, the forward half of its length being formed with a concentric counterbore 31. Formed in the underside of the fore-end adjacent its forward end and extending longitudinally thereof is a slot indicated generally at 32, which extends upwardly substantially vertically to intersect the longitudinal counterbore 31 of the aperture 30 in the fore-end, said slot having a transverse head-portion 33 comprising a relatively-wide substantially-rectangular aperture which intersects the aforesaid longitudinal aperture 30 at its junction with the counterbore 31, the slot 32 and head-portion 33 being hereinafter referred to as a "T-shaped slot." The rear edge of the transverse head-portion 33 of the slot 32 is formed with a bevel 34 to facilitate latching and unlatching the operating-lever of the takedown mechanism, as hereinafter described. Formed in the bottom of the concave clearance-groove 28 of the fore-end is a rectangular aperture 35 which extends downwardly substantially vertically into the fore-end to intersect the forward end of the longitudinal aperture 30 at its junction with its counterbore 31, the rear wall 36 of the vertical aperture 35 being coextensive with the rear wall 37 of the head-portion 33 of the T-shaped slot. Although the rear walls of the aperture 35 and the aperture 33 of the T-shaped slot are substantially in vertical alignment, the vertical front wall 38 of the aperture 35 extends forwardly of the corresponding front wall 39 of the aperture 33, as is shown especially well in Figs. 1 and 3, and hence the bottom of the rear end-portion of the counterbore 31 extends rearwardly with respect to the front wall 38 of the aperture 35.

It may be well to point out here that the aforesaid interrupted threads of the barrel and receiver are relatively coarse and do not have the pitch of a screw thread, and hence turning the barrel through an angle of substantially 90° relative to the receiver to engage and disengage the interrupted threads thereof does not effect any appreciable tightening or loosening respectively of the barrel therein, the interrupted threads being adapted primarily to couple the barrel to the receiver. Consequently, the barrel is adapted to be locked securely in the receiver against both rotation and longitudinal displacement by coaction of the barrel locking-lug 19, the tubular magazine 16, and the fore-end 17 with the superior takedown mechanism of this invention.

The takedown mechanism comprises, in the main, a takedown bushing 42, a takedown connector 43 and a bushing locking-block 44. Referring especially to Figs. 11 and 12, the locking-block 44 is a solid metal block substantially rectangular in cross section and provided with a transverse notch in its front face which divides the block vertically into a head-portion 46 and a tongue-portion 47. The overall dimensions of the head-portion 46 and tongue-portion 47 respectively of the locking-block 44 equal the corresponding dimensions of the vertically-aligned apertures 35 and 33 respectively of the fore-end, so that when the locking-block is inserted tongue-end first into the upper end of the vertically-aligned apertures and pressed down therein, the tongue-portion 47 of the locking-block will fit snugly in its aperture 33 with the bottom of the tongue-portion 47 substantially flush with the underside of the fore-end. The head-portion 46 of the locking-block is adapted likewise to fit snugly in the upper aperture 35 of the fore-end with its top surface 49 substantially flush with the upper surface thereof, and to this end the top surface 49 is formed with a concave cylindrical surface of revolution having a radius equal to the radius of the concave clearance-groove 28 of the fore-end. A vertical aperture 50 extends down through the head-portion 46 of the locking-block to accommodate a screw for securing the locking-block to the takedown bushing, as hereinafter described, the aperture 50 being formed adjacent the forward end of the head-portion so as to intersect the concave surface 52.

Extending through the locking-block on a longitudinal axis intermediate its upper and lower ends so as to be aligned axially with the longitudinal aperture 30 and counterbore 31 of the fore-end is a cylindrical bushing-aperture 51, which intersects both the underside of the head-portion 46 of the locking-block and the upper end of the tongue-portion 47 thereof. Moreover, the portion of the bushing-aperture 51 which intersects the underside of the locking-block head-portion 46 may be said to constitute a semicircular counterbore 52 which forms a semicylindrical surface of revolution on the underside of the head-portion 46 concentric with the bushing-aperture 51 and substantially equal in diameter to the diameter of the counterbore 31 of the fore-end.

Referring especially to Figs. 11 and 12, the lower end of the tongue-portion 47 of the lock is provided with a slot 53 which extends upwardly substantially vertically therein and is cut through the tongue-portion of the locking-block from front to rear thereof, while that portion of the slot which intersects the rear face of the tongue is widened transversely by forming oppositely-disposed notches in corresponding side walls of the slot, so as to provide a substantially-rectangular shouldered recess 54 in the rear face of the tongue.

The locking-block 44 is inserted in the vertically-aligned apertures of the fore-end in the manner described above so as to secure the takedown bushing 42 in the axially-aligned aperture 30 and counterbore 31 of the fore-end. To this end, the takedown bushing comprises a cylindrical barrel-portion 56 and an integral rearwardly-extending hollow cylindrical shank-portion 57, as shown especially well in Figs. 1 and 3, the outside diameter of the latter corresponding substantially to the diameters of the longitudinal axially-aligned apertures 30 and 51 of the fore-end and locking-block respectively, such that the hollow cylindrical shank 57 of the bushing will fit snugly therein. Moreover, the external diameter of the barrel-portion 56 of the bushing corresponds substantially to the diameters of the

counterbore 31 of the fore-end and the semi-circular counterbore 52 of the locking-block so as to make a snug fit therein, the over-all length of the barrel-portion 56 of the bushing corresponding substantially to the distance from the front end of the fore-end to the front face of the tongue-portion of the locking-block. The rear end of the barrel-portion 56 of the bushing forms an annular substantially-square shoulder 58 with its integral hollow shank-portion 57, the annular square shoulder 58 being adapted to abut against the front face of the tongue 47 of the locking-block when the bushing is assembled therein to hold the bushing from moving rearwardly in the locking-block. To positively secure the bushing in the locking-block, a screw 59 is adapted to be inserted into the vertical aperture 50 in the head-portion of the locking-block and to threadedly engage in an internally-threaded substantially-vertical aperture 60 in the rear wall 62 of the barrel-portion 56 of the bushing, as shown especially well in Figs. 1 and 7. In this connection, it will be noted that the cylindrical bore 61 of the barrel-portion of the bushing is terminated forwardly of its annular square shoulder 58 sufficiently distant to provide the barrel with the relatively-thick substantially-flat rear wall 62 which is apertured centrally by an extension of the bore 63 of the shank 57 to form a forwardly-facing substantially-square internal shoulder 64 at the rear end of the barrel bore. Formed in the bottom of the barrel-portion of the bushing and extending forwardly longitudinally from its internal shoulder 64 to the forward end of the bushing is a relatively-narrow slot 65 which is substantially equal in width to the vertical slots 53 and 32 of the locking-block and fore-end respectively and is adapted to accommodate the operating-lever of the takedown connector 43, as hereinafter described.

When assembled and secured in the fore-end by means of the locking-block as described above, the takedown bushing 42 is adapted to support the takedown connector 43 for effecting a substantially-rigid connection between the barrel-unit and frame-unit and which is shown especially well in Fig. 9, comprises a screw having a substantially cylindrical body-portion 66 provided with a substantially-square end wall 66', the body-portion 66 of the screw being dimensioned diametrically so as to make a smooth-sliding fit in the bore 61 of the bushing and longitudinally substantially equal in length to the barrel-portion 56 thereof. Formed integrally on the rear end of the body-portion 66 of the slidable screw is a rearwardly-extending substantially-solid cylindrical stem-portion 67, the center portion 68 thereof intermediate its opposite ends being substantially equal in diameter to the diameter of the bore 63 of the hollow shank 57 of the bushing so as to make a smooth-sliding fit therein. The opposite ends 69 and 70 respectively of the stem 67 are of reduced diameter, the former to provide clearance normally within the hollow shank of the bushing opposite the bushing retaining-screw 59 whereby the lower end of the latter is adapted to project down into the clearance-space to engage the forwardly-facing shoulder of the reduced end 69 of the stem-portion of the screw to prevent the screw from sliding forwardly out of the bushing when disconnected from the barrel locking-lug 19. Abutment of the end wall 66' of the body-portion 66 of the takedown screw against the forward-facing shoulder 64 of bushing 42 provides a stop for the rearward longitudinal movement of the takedown screw. By this means the screw is constrained for rotational and limited longitudinal movement both fore and aft within the fore-end. The rear end 70 of the stem is reduced in diameter so as to fit snugly in the aforesaid eccentric longitudinally-extending aperture or socket 25 in the magazine-plug. In this respect, both the rear end 70 of the stem and the aperture 25 of the magazine-plug constitute connecting elements, both for insuring alignment of the fore-end with the magazine and a substantially-rigid connection therebetween. The external threads 71 at the rear end of the center portion 68 of the screw are adapted to be threadedly engaged in an internally-threaded aperture 72 formed in the short leg 21 of the barrel-lug for locking the barrel-unit to the frame-unit, as hereinafter described.

Referring to Figs. 4, 5, 6 and 9, the aforesaid body-portion 66 of the takedown screw is provided with a substantially-vertical slot 73 which extends from the front end thereof rearwardly and terminates in a substantially-vertical rear wall 74 forwardly of the rear end of the body-portion 66, the corners at the upper and lower ends of the aforesaid wall being beveled downwardly and forwardly as indicated at 75 and 76 respectively, to provide clearance for the operating-lever of the takedown screw, as hereinafter described. Moreover, the aforesaid vertical rear wall 74 of the slot is intersected by the forward end of a longitudinal aperture 77 which extends from the front face of the wall rearwardly substantially half the length of the solid stem-portion 67 of the screw to accommodate a coil-spring 78 and to provide a guide-passage for a spring-loaded plunger 79. The rear end of the latter is adapted to engage against the forward end of the coil-spring, while the forward end of the plunger is adapted to extend forwardly beyond the substantially-vertical rear wall 74 of the aforesaid slot, both when the spring is compressed as shown in Fig. 1 and when it is expanded as shown in Fig. 3.

The spring and spring-plunger constitute elements of a latch mechanism for releasably holding the operating-member of the takedown screw in the aforesaid T-shaped slot of the fore-end, the other elements of the latch mechanism comprising a link-member 80 slidably mounted in the slot 73 of the body-portion 66 of the screw for longitudinal movement therein, and consisting of two relatively-thin flat leaves 81, each leaf being substantially equal in length to the length of the slot 73. Moreover, each leaf is substantially equal in width to the diameter of the body 66 of the screw, while the upper and lower edges of each leaf are beveled to conform with the periphery thereof. These leaves are adapted to be spaced apart in substantially parallel relationship by an integral spacer-block 82 formed between the leaves at the rear ends thereof, the spacer-block having a substantially-vertical rear face 83 adapted to be opposed to the vertical wall 74 of the slot 73 when the link-member 80 is mounted therein and to be engaged by the forward end of the spring-plunger 79. The upper and lower edges 84 and 85 respectively of the spacer-block are tapered downwardly-and-forwardly and upwardly-and-forwardly respectively to a degree to intersect at their forward ends in an apex on substantially the longitudinal axis of the link-member, thereby to provide clearance for actuation of the operating-member of the takedown screw, as hereinafter described. As shown especially well in Fig. 10, an aperture 86 is formed

transversely through the link-member 80 adjacent the apex of the spacer-block, the aperture being extended through the side of one of said leaves and coinciding with the rear end of a longitudinal guide-slot 87 formed therein. The guide-slot 87 is adapted to receive the inwardly-projecting end 88 of a limit-pin 89 which is fixedly secured transversely in the corresponding side of the body-portion 66 of the takedown screw both for guiding the link-member 80 longitudinally in the vertical slot 73 thereof and for limiting its longitudinal movement therein. The forward ends of the spaced-parallel leaves of the link-member are held in spaced-parallel relationship by the inner end of the takedown-screw operating-member 90, which comprises a lever the inner end of which is pivotally secured between the forward ends of the leaves by a transverse pivot-pin 91.

The operating-lever 90 is of substantially-uniform thickness throughout its length, its thickness being only slightly less than the transverse spacing of the leaves of the link-member and the widths of the respective slots 65, 32 and 53 of the bushing, fore-end and locking-block. Thus, when the link-member 80 and its pivoted operating-lever 90 are mounted in the slot 73 of the takedown screw, the operating-lever may be swung freely back and forth in the longitudinal, coincidental slots 65 and 32 of the bushing and fore-end for the purpose hereinafter described, the aforesaid tapered upper and lower edges of the spacer-block 82 and the upper and lower beveled corners of the rear wall 74 of the slot 73 providing clearance for the operating-lever as indicated especially well in Fig. 1.

Referring to Figs. 1, 2, 4, 8 and 9, the outer end of the operating-lever is seen to be provided with a transverse latch-bar 92, the transverse bar being substantially semi-cylindrical in shape with its rear substantially-flat face provided with a longitudinal groove 93 substantially U-shaped in cross section as and for the purpose hereinafter described. Moreover, the transverse latch-bar of the operating-lever is dimensioned to correspond substantially to the size of the shouldered recess 54 in the back of the tongue-portion 47 of the locking-block so as to fit nicely therein with its cylindrical front face in engagement with the front face of the shouldered recess and the adjacent portion of the operating-lever engaging in the slot 53 of the tongue. The over-all length of the operating-lever is such that when the link-member of the latch mechanism is resiliently held by the spring 78 and spring-plunger 79 at the limit of its forward movement in the slot 73 of the takedown screw, as determined by engagement of the rear end of the guide-slot 87 of the link-member with the transverse limit-pin 89, as shown in Fig. 3, the reach of the operating-lever is less than that required to engage its latch-bar 92 in the shouldered recess 54 in the back face of the locking-block. However, by pressing rearwardly on the front end of the link-member to compress the spring 78, the link-member may be pushed rearwardly in the slot 73 to its rearmost position to bring the latch-bar 92 of the operating-lever behind the front face of the recess 54 of the locking-block, whereby the latch-bar may be swung up into the slot of the fore-end into engagement with the shouldered recess of the locking-block. Then on releasing the forward end of the link-member, the force of the compressed spring 78 acting through engagement of the spring-plunger with the rear face 83 of the link-member tends to urge the latter forwardly and hence to resiliently hold the transverse latch-bar firmly against the front face of the recess 54, thereby to frictionally retain the operating-lever in its latched or inoperative position in the slot of the fore-end, as shown in Fig. 1.

The operation of the takedown mechanism is briefly as follows. Assuming the frame-unit and barrel-unit of the firearm are disassembled and that the screw 43 of the takedown mechanism of the fore-end is out of engagement with the locking-lug of the barrel, the operating-lever 90 of the takedown mechanism being unlatched from the locking-block 44, as shown in Figs. 3 and 4; the first step in assembling the units is to engage the interrupted threads at the rear end of the barrel with the interrupted threads on the interior of the barrel-receiving aperture in the front wall of the receiver to couple the barrel thereto, the coupling of the respective threads being effected by rotating the barrel through substantially 90° relative to the receiver, the locking-lug of the barrel being simultaneously moved into a vertical plane immediately beneath the underside thereof and in registration with the front end of the magazine. Thereafter, the fore-end 17 is slipped over the forward end of the tubular magazine 16 and moved rearwardly thereon to seat the cameo shoulder 26 at the rear end of the fore-end in the recess 27 of the front face of the receiver. The elements of the assembly are then in the positions indicated in Fig. 3 in which the rear end 70 of the takedown screw is in axial alignment with both the internally-threaded aperture 72 of the barrel locking-lug 19 and the longitudinal aperture 25 of the magazine-plug 24. The operator then grasps the unlatched operating-lever 90 of the takedown screw and rotates the latter in a clockwise direction, as viewed in Fig. 4, while simultaneously pressing rearwardly on the link-member 80 so as to engage the threads 71 of the screw in the internally-threaded aperture 72 of the barrel locking-lug 19. Since the takedown screw is effectively held from moving rearwardly in the bushing by engagement of the square shoulder 66' at the rear end of its body-portion 66 with the internal shoulder 64 of the bushing, continued rotation of the operating-lever takes up any slack between the interrupted threads of the barrel and receiver so as to form a tight connection therebetween and thereafter the fore-end 17 is drawn rearwardly with respect to the barrel 18, so as to firmly seat the cameo shoulder 26 of the fore-end in the aforesaid recess 27 of the receiver. Simultaneously, the reduced rear end 70 of the screw 43 enters into the aperture 25 of the magazine-plug to make a substantially-rigid connection between the forward end thereof and the fore-end 17. Consequently, the barrel-unit and frame-unit are rigidly connected together, the barrel being positively held from rotation about its longitudinal axis by engagement of the takedown screw in the locking-lug thereof, the takedown screw 43 itself being held securely against longitudinal movement by reason of the tension developed in the connection between the barrel-unit and the frame-unit. Now the operator may swing the pivoted operating-lever 90 upwardly into the slot 32 of the fore-end and by pressing rearwardly on the forward end of the link-member 80, slide the latter rearwardly in the slot 73 of the fixed screw 43 so that the latch-bar 92 of the lever may engage the forward and upper faces of the recess 54 in the

rear face of the tongue of the locking-block, whereby the operating-lever will be effectively held up in the slot 32 of the fore-end in its retired position by the force of the compressed spring 78 as hereinabove described. In its retired position, the operating-lever will be seen to be withdrawn into the longitudinal slot 32 of the fore-end so as to be wholly unexposed, and hence is fully protected from accidental injury and inadvertent release.

To release the operating-lever 90, the shooter may engage his fingernail or the rim of a cartridge in the transverse groove 93 of the latch-bar 92, which is facilitated by the beveled edge 34 of the aperture 33 in the underside of the fore-end, to pry the latch-bar 92 of the operating-lever downwardly out of frictional engagement with the shouldered recess 54 in the rear face of the tongue 47 of the locking-block, whereupon the force of the compressed spring 78 of the latch mechanism pushes the link-member 80 forwardly in the slot 73 of the takedown screw 43 to carry the pivoted end 91 of the operating-lever forwardly out beyond the front end of the fore-end 17 and its bushing 42 to a position as indicated by the broken lines in Fig. 1, at which it is stopped by coaction of the limit-pin 89 with the guide-slot 87 of the link-member. The operating-lever then hangs down in its operating position clear of the fore-end and at substantially right angles to the screw. Hence, by rotating the operating-lever counterclockwise, the threaded end of the screw may be disengaged from the locking-lug 19 of the barrel for disassembling the barrel-unit and the frame-unit of the firearm.

The invention may be carried out in other specific ways than those herein set forth without departing from the spirit and essential characteristics of the invention, and the present embodiments are, therefore, to be considered in all respects as illustrative and not restrictive, and all changes coming within the meaning and equivalency range of the appended claims are intended to be embraced therein.

I claim:

1. A takedown firearm, including in combination: a barrel-unit having a barrel-locking lug; a frame-unit including a tubular magazine having a connecting-element at the forward end thereof; a slotted fore-end arranged to cooperatively engage said frame-unit and said barrel-unit; and takedown-means mounted in said slotted fore-end, said takedown-means comprising a locking-block secured in said fore-end and having a shouldered recess coextensive with the slot of said fore-end, a screw extending longitudinally through said locking-block and arranged to engage the said locking-lug of said barrel-unit and the connecting-element of said tubular magazine to releasably secure said barrel-unit substantially rigidly to said frame-unit, and an operating-lever for operating said takedown-screw, said operating-lever being arranged to lie in the slot of said fore-end in releasable engagement with the shouldered recess of said locking-block when in its normal inoperative position and to be withdrawn from said slot for operating said screw.

2. A takedown firearm, including in combination: a barrel-unit having a barrel-locking lug; a frame-unit including a tubular magazine having a connecting-element at the forward end thereof; a slotted fore-end arranged to cooperatively engage said frame-unit and said barrel-unit; and takedown-means mounted in said slotted fore-end, said takedown-means comprising a locking-block secured in said fore-end and having a shouldered recess coextensive with the slot of said fore-end, a screw extending longitudinally through said locking-block and arranged to engage the said locking-lug of said barrel-unit and the connecting-element of said tubular magazine to releasably secure said barrel-unit substantially rigidly to said frame-unit, an operating-lever for operating said takedown-screw, said operating-lever being arranged to lie in the slot of said fore-end in releasable engagement with the shouldered recess of said locking-block when in its normal inoperative position and to be withdrawn from said slot for operating said screw, and latch-mechanism mounted in said fore-end and arranged to releasably hold said operating-lever in the slot of said fore-end.

3. A takedown firearm, including in combination: a barrel-unit having a barrel-locking lug; a frame-unit including a tubular magazine having a connecting-element at the forward end thereof; a slotted fore-end arranged to cooperatively engage said frame-unit and said barrel-unit; and takedown-means mounted in said slotted fore-end, said takedown-means comprising a locking-block secured in said fore-end and having a shouldered recess coextensive with the slot of said fore-end, a screw extending longitudinally through said locking-block and arranged to engage the said locking-lug of said barrel-unit and the connecting-element of said tubular magazine to releasably secure said barrel-unit substantially rigidly to said frame-unit, a screw-operating lever, and latch-mechanism mounted in said fore-end and arranged to secure said operating-lever to said screw to hold said operating-lever in the slot of said fore-end in releasable engagement with the shouldered recess of said locking-block.

4. A takedown firearm, including in combination: a barrel-unit having a barrel-locking lug; a frame-unit including a tubular magazine having a connecting-element at the forward end thereof; a slotted fore-end arranged to cooperatively engage said frame-unit and said barrel-unit; and takedown-means mounted in said slotted fore-end, said takedown-means comprising a locking-block secured in said fore-end and having a shouldered recess coextensive with the slot of said fore-end, a screw extending longitudinally through said locking-block and arranged to engage the said locking-lug of said barrel-unit and the connecting-element of said tubular magazine to releasably secure said barrel-unit substantially rigidly to said frame-unit, a screw-operating lever, and latch-mechanism including a link-member slidably mounted on said screw and arranged to secure said operating-lever to said screw for movement longitudinally relative thereto, and for movement into and out of the slot of said fore-end thereby to releasably hold said operating-lever in engagement with the shouldered recess of said locking-block.

5. A takedown firearm, including in combination: a barrel-unit having a barrel-locking lug; a frame-unit including a tubular magazine having a connecting-element at the forward end thereof; a slotted fore-end arranged to cooperatively engage said frame-unit and said barrel-unit; and takedown-means mounted in said slotted fore-end, said takedown-means comprising a locking-block secured in said fore-end and having a shouldered recess coextensive with the slot of

said fore-end, a screw extending longitudinally through said locking-block and arranged to engage the said locking-lug of said barrel-unit and the connecting-element of said tubular magazine to releasably secure said barrel-unit substantially rigidly to said frame-unit, a screw-operating lever, latch-mechanism including a link-member slidably mounted on said screw and arranged to secure said operating-lever to said screw for movement longitudinally relative thereto, and for movement into and out of the slot of said fore-end thereby to releasably hold said operating-lever in engagement with the shouldered recess of said locking-block, and a resilient element interposed between said screw and said link-member to urge said link-member forwardly out of the slot of said fore-end and thereby to resiliently hold said operating-lever in releasable engagement with the shouldered recess of said locking-block.

6. In a takedown firearm, the combination which comprises: a barrel-unit having a barrel-locking lug; a frame-unit having a longitudinal barrel-receiving aperture therein, said aperture and said barrel-unit having interrupted thread coupling means engaged when said locking lug is disposed substantially vertically downward; a tubular magazine secured to said frame-unit, and having a socket at the forward end thereof; a slotted fore-end cooperatively engaging in the assembled firearm a forward face of the frame-unit and the underside of said barrel-unit and receiving within a slotted portion said barrel-locking lug and magazine; and takedown means comprising a connector member extending longitudinally through said fore-end and constrained therein for rotational and limited fore-and-aft movement, an operating lever pivotally secured to the forward end of said connector member, said lever being swingable from a retracted position in which it lies recessed in a slotted portion of said fore-end to an operating position free of said fore-end, said connector member in the assembled firearm being positioned in its aft limiting position and passing through said locking lug in threaded engagement therewith and into said socket at the forward end of said tubular magazine to secure said fore-end member, magazine and barrel-unit together.

7. The combination in a takedown firearm as defined in claim 6, wherein said operating lever is secured to the forward end of said connector member by means of a longitudinal slide member which, in the operating position of said lever, causes the latter to project forwardly beyond the front face of the fore-end but allows complete retraction of said operating lever within the slotted portion of said fore-end member when said lever is disposed in its retracted position.

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