

No. 821,889.

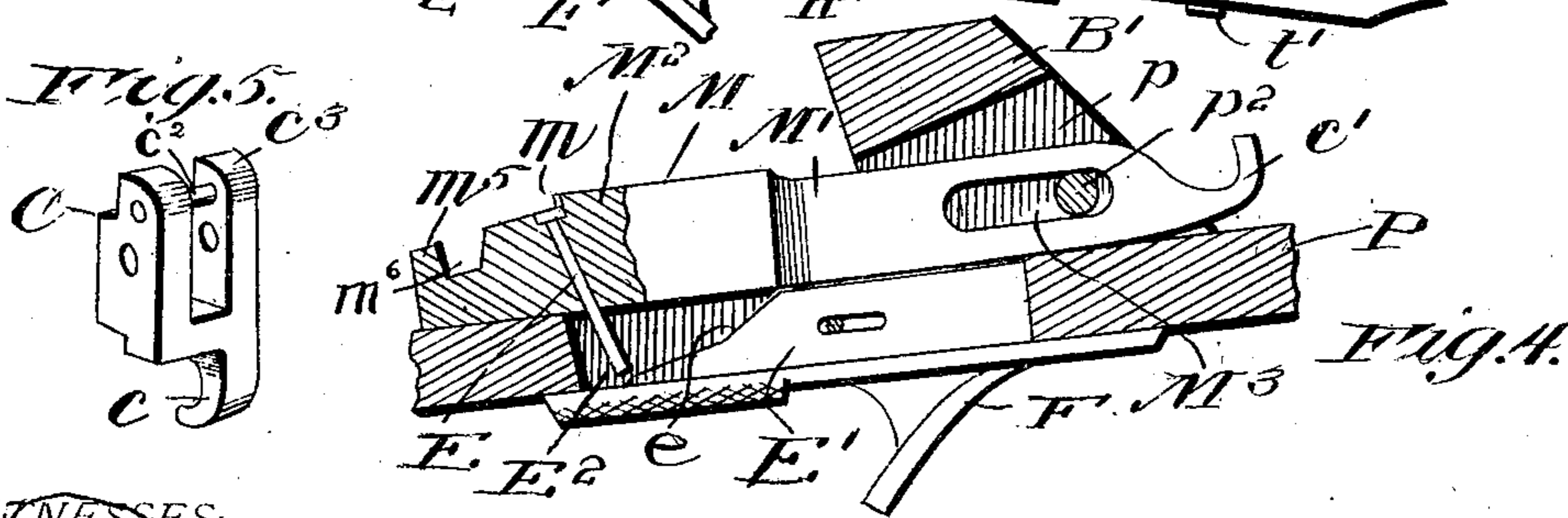
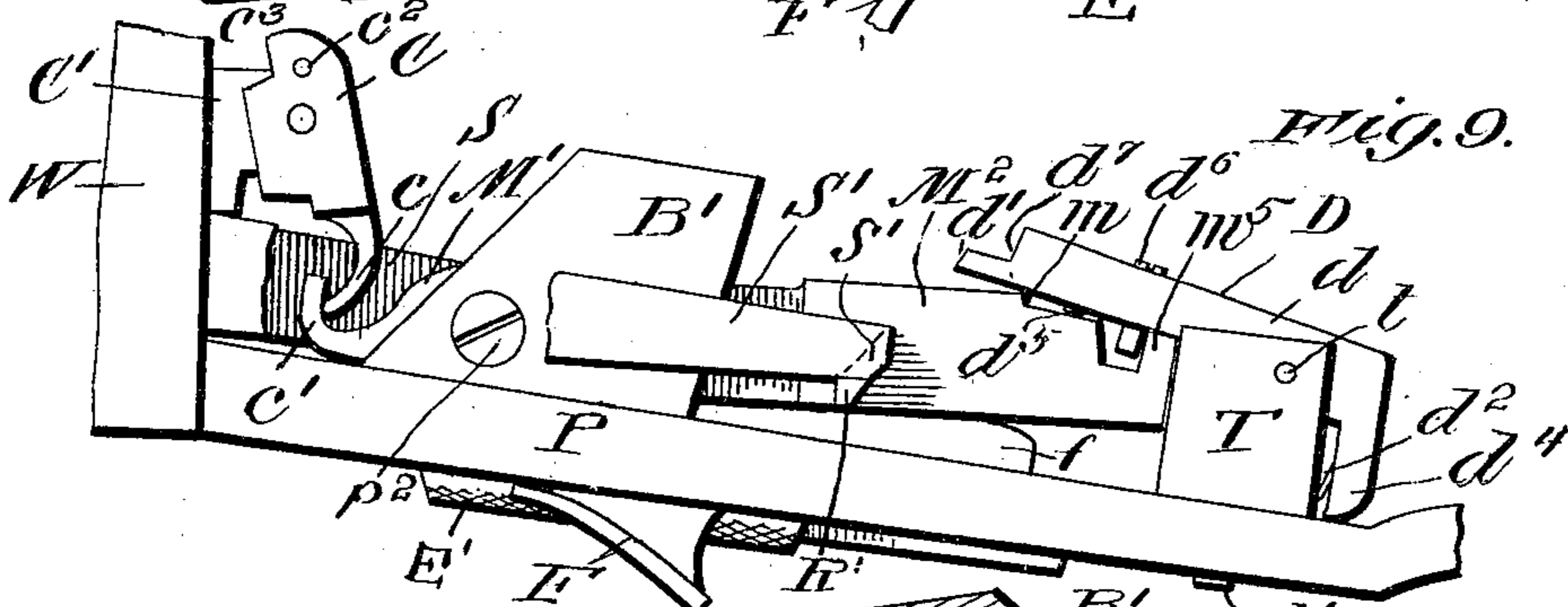
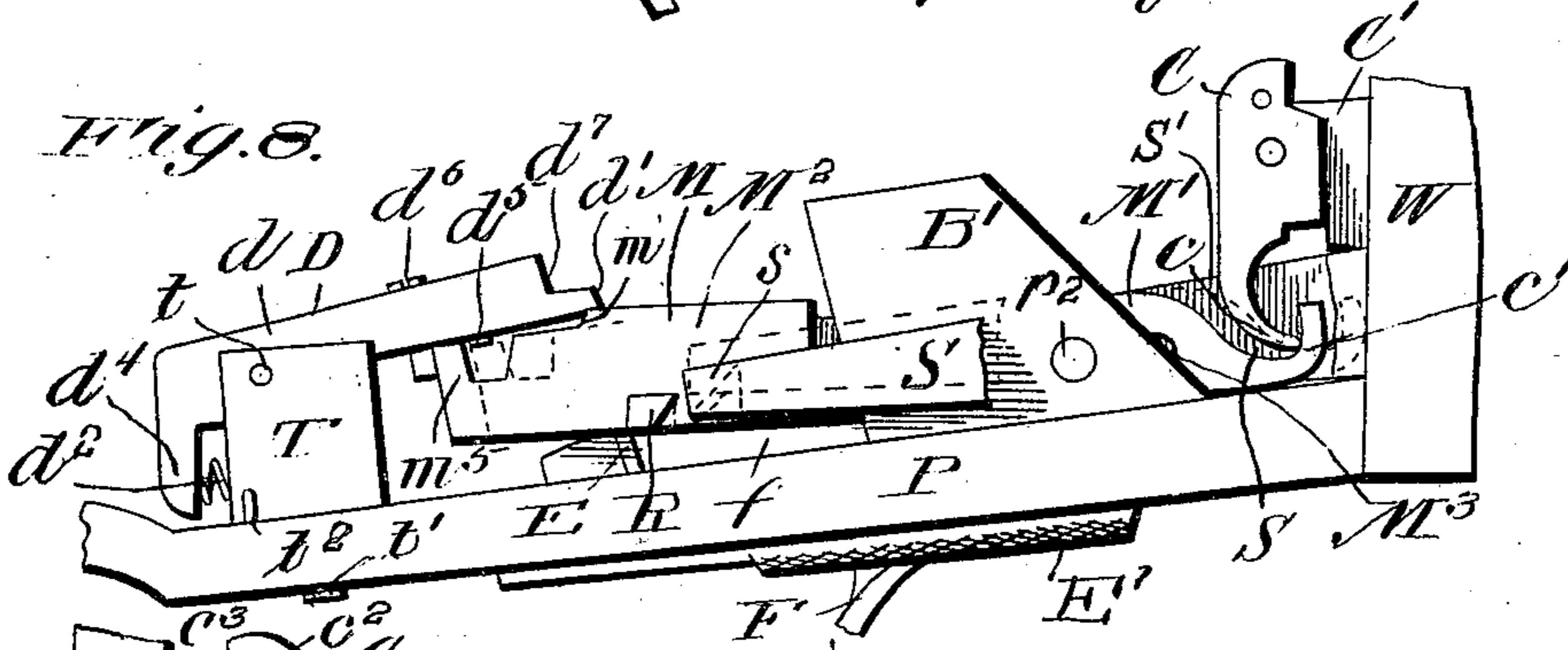
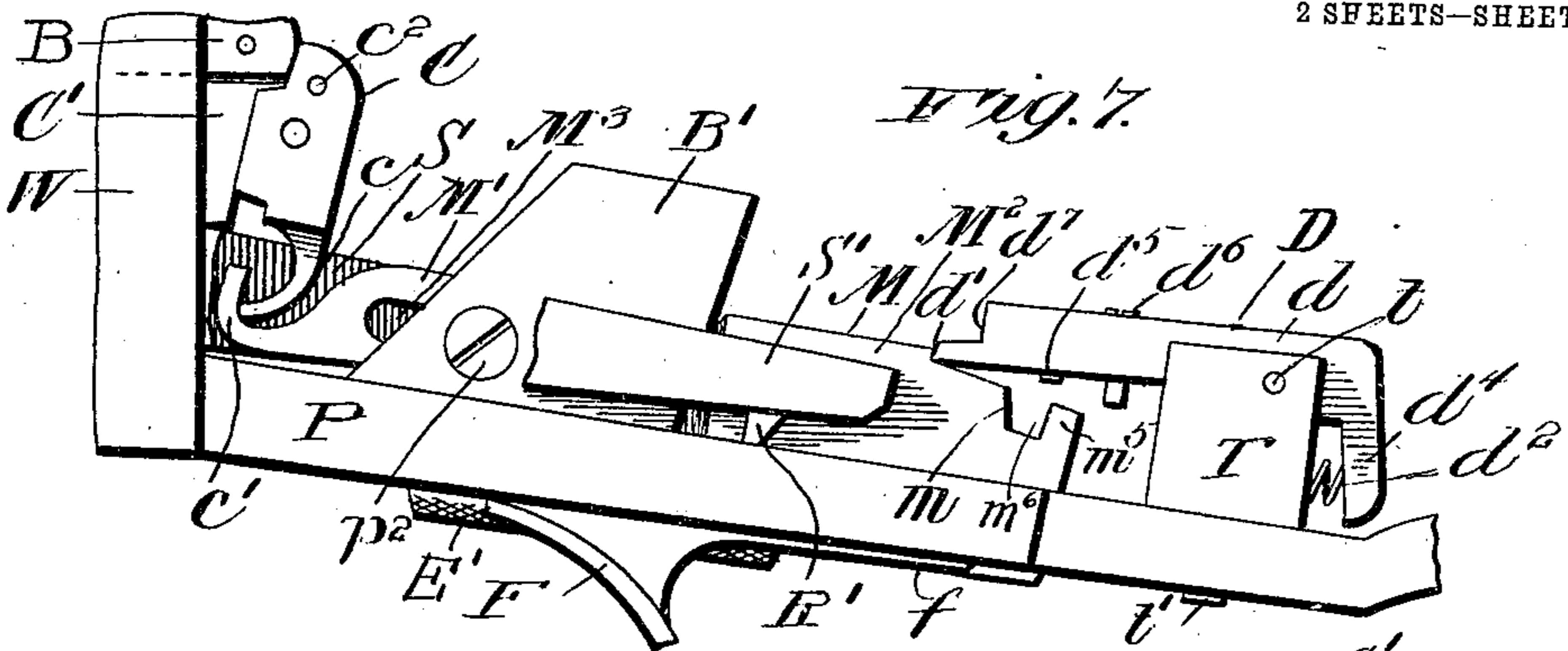
PATENTED MAY 29, 1906.

J. D. RUSS.

TRIGGER MECHANISM.

APPLICATION FILED DEC. 10, 1904.

2 SHEETS—SHEET 2.



WITNESSES:

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TRIGGER MECHANISM.

No. 821,889.

Specification of Letters Patent.

Patented May 29, 1906.

Application filed December 10, 1904. Serial No. 236,322.

To all whom it may concern:

Be it known that I, JOHN D. RUSS, a citizen of the United States, residing at Spencer, in the county of Roan and State of West Virginia, have invented certain new and useful Improvements in Trigger Mechanism; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to firearms, and more particularly to double-barrel break-down shotguns.

The objects of the invention are to provide a single-trigger mechanism for releasing the hammers of both barrels of such an arm which shall be of great simplicity and occupy an extremely small space in the lock of the gun, so as to require minimum cutting away and consequent weakening of the stock, and which will absolutely prevent "doubling"—that is, firing both barrels when it is desired to fire but one.

The invention relates to a trigger mechanism in which a movable trigger member connects a single finger-trigger piece and the hammers of the gun, such trigger member actuating the hammers, preferably, through suitable sears. This trigger member is arranged to occupy releasing positions with reference to the sears, and therefore to the hammers, successively, and means is provided for giving the trigger member a release-positioning movement from first to second releasing position, and another means provides for giving the trigger member a setting movement to first releasing position again. At each releasing position the finger-trigger piece, which is an embodiment of single manual actuating means, moves the trigger member to bring about hammer release whether such release is effected by the direct engagement of the trigger member with the sears or through the actuation of an intermediate part or parts by the trigger member, as disclosed in my copending application, Serial No. 255,756. By a "releasing" position I do not necessarily indicate that the trigger member is while in such position contiguous to one of the sears, but merely that the trigger member is in such position as to be actuated by the next voluntary finger-

pressure upon the finger-trigger piece to effect release of one of the sears. By "single" I do not refer to the number of elements that may be disposed between the finger and the trigger member, but indicate merely that one mechanism brings about release of both hammers. I have illustrated the trigger member as constituting a slide; but it will be apparent that the particular form or mounting of the trigger member is not essential to my invention, as this element might be arranged for reciprocatory movement in the lock-chamber in a variety of ways. For temporarily retaining the trigger member in initial position I provide an automatic detent distinct from the finger-trigger piece and the sears, which is preferably disengaged from the slide by the movement of this member itself during the first hammer-releasing movement. The release of the sears is, by preference, brought about by the elevation of the trigger member at releasing positions by the finger-trigger piece, and to prevent the trigger member from passing from first to second releasing positions immediately upon the first discharge, in which event the involuntary pull upon the finger-trigger piece would prematurely discharge the other barrel, I provide a stop that is operative during the first elevation of the trigger member to prevent the latter from assuming second releasing position until after the involuntary pull has occurred. I prefer to arrange the parts so that the trigger member is free to resume its release-positioning movement on being allowed to fall to its normal plane, the stop being so proportioned as to retain the trigger member until after said involuntary pull has taken place. This stop device I have elected to mount upon the detent already alluded to, though such arrangement need not necessarily be adhered to. Two features of my invention reside in so constructing the parts that the disengagement of the detent from the trigger member and the escape of the latter from the stop may be timed to suit the user of the gun.

Constituting another feature of the invention is means for preventing the engagement of the releasable detent with the trigger member or for removing it from such engagement without actuating the trigger member out of its normal movement, so that the member

will pass immediately to the second releasing position without releasing the first hammer.

The constructions embodying the invention as outlined will be described in detail in the following specification and illustrated in the drawings, wherein—

Figure 1 is a side elevation of the interior of the lock of a gun of the type described with my improved trigger mechanism applied thereto, showing the parts in the second releasing position. Fig. 2 is a vertical longitudinal section on the line 2 2 of Fig. 3. Fig. 3 is a plan view of Fig. 2. Fig. 4 is a vertical longitudinal section on the line 4 4 of Fig. 3. Fig. 5 is a detail perspective view of the trigger-setting lever. Figs. 6 and 6^a are details of the right and left hammer-sears, respectively. Fig. 7 is a side elevation of the trigger mechanism corresponding to Fig. 1, except that the parts are shown in the initial releasing position. Fig. 8 is an elevation of the opposite side of the mechanism, showing in full lines the parts in the intermediate arrested position and in dotted lines the parts in the first released position; and Fig. 9 is a side elevation corresponding to Figs. 1 and 7 with the parts in the second released position.

Referring to the drawings, S and S' are the right and left hammer-sears, respectively, and H one of the hammers, the latter being indicated in Fig. 1. As the construction of the hammers and the relative arrangement of the hammers and sears are familiar in the ordinary type of double-trigger guns, it will be necessary only to say that the hammers are released upon the elevation of the rear ends of the sears and the consequent depression of the forward ends which engage with the hammers.

B is the ordinary reciprocating locking-bolt, which locks the barrels to the stock and is operated by thumb-piece U. As the construction and operation of these parts are so well known in the art, detailed illustration is deemed unnecessary.

B' is a block secured to or formed integral with the trigger-plate P between the hammer-sears S S' and is shown as being of the general form of the block, to which the two finger-trigger pieces are pivoted in the ordinary double-trigger guns. This block is provided with two parallel longitudinal slots *p* and *p'*, in one of which, preferably the left, is pivoted on transverse pin *p*² the single finger-trigger piece F, whose rear portion *f* is in consequence adapted to have an oscillatory movement in a vertical plane through slot *f'* in the trigger-plate.

The more essential parts of the present invention are comprised in trigger member M, trigger-setting lever C, and trigger-member detent D. The hammer-sears are arranged in the well-known manner, being horizontally pivoted in parallel at the remote sides of the lock-chamber. Their rear ends are

provided with inward-projecting engaging lugs *s* and *s'*, which are substantially in transverse alinement. In these the rear face of lug *s*—the lug of the right sear—is inclined upward and forward, and the forward face of lug *s'* downward and forward inclined, both for a purpose to be later specified.

Movable trigger member M is in the form of a slide mounted for longitudinal reciprocatory motion on the trigger-plate between the hammer-sears and having a reduced knife-like forward portion M', that passes freely through the right slot *p* in block B'. The motion of the trigger member is limited at one extreme by the forward wall W of the lock-chamber and at the rear extreme by trunnion-block T, to be fully described hereinafter. The portion of the trigger member that passes through slot *p* in block B' is provided with a transverse slot M³, that is elongated longitudinally of the trigger member and receives pin *p*², the whole forming a sort of slotted bearing for permitting limited oscillation of the trigger member in a vertical plane, the bottom of the forward portion of the trigger member being slightly curved, so as to permit rocking upon the trigger-plate.

While the trigger member may be constructed in any suitable manner to bring about successive release of the hammers, I regard as very efficient an arrangement in which the rear body portion of the trigger member is provided with individual hammer-releasing devices in the form of lugs R and R', projecting laterally from the right and left sides of the trigger member, respectively, and adapted to release the hammers by engaging with the intumed ends *s* and *s'*, respectively, of the hammer-sears. Lug R' is positioned farther forward on the trigger member than lug R, so that during the movement of the trigger member to the rear it will be brought into releasing position with reference to sear end *s'* after lug R has occupied a similar position with reference to end *s*. In the present embodiment of this invention, contemplating the use of upward-acting trigger-sears, the releasing positions of the hammer-releasing lugs will be immediately beneath the sear ends, and to this end the lugs are positioned to reciprocate in a plane below that of the sear ends, and means are provided, in the shape of finger-trigger piece F, whose rear portion *f* underlies the body portion of the trigger member for tilting the latter upward about its slotted bearing at each releasing position, or at one, to bring the trigger member and hammer-releasing devices into released position with the rear ends of the sears elevated by the hammer-releasing lugs.

The front face of lug R is inclined upward and forward, so as to be practically parallel with the rear face of sear end *s*, and the rear face of lug R' is inclined downward and for-

ward, so as to bear a similar relation to the front face of the sear end s' , the objects of these constructions to be explained later.

While it will be obvious that the arrangement of trigger-setting lever C may be in any manner efficiently to draw the trigger member forward, it is preferred to pivot the lever in an upright position intermediate its ends to a block C' , screwed into the forward wall W of the lock-chamber. The depending end c of the lever is reduced in width so as to be little wider than the reduced portion M' of the trigger member, and is formed in hook shape to engage removably with an upward-facing hook c' , constituted in the forward end of such portion M' . The setting-lever may be operated in any suitable manner without departing from the spirit of my invention; but I prefer that it be actuated by the rear portion of locking-bolt B, which, on unlocking the breech of the gun—for cocking the hammers and permitting the insertion of the shells, as is so commonly understood—forces the upper end of the setting-lever rearward and the lower end, in consequence, forward. Since, as is well known, the locking-bolt in breakdown guns must be retracted prior to the cocking of the hammers, it will be obvious that means is provided for setting the trigger mechanism simultaneously with the cocking of the hammers, though the trigger mechanism may be set without cocking the hammers by simply retracting the locking-bolt without breaking the gun. The setting-lever is provided with means for preventing undue movement in either direction, which might effect disengagement of the lever with the trigger member, and, as illustrated, this means is embodied in a transverse pin c^2 , passing between upright ears c^3 on the upper end of the lever and arranged to engage at the limits of motion with the ends of a curved depression c^4 on the upper face of block C' .

Trigger-member detent D is, in the form of my invention illustrated, a lever pivoted to trunnion-block T and disposed longitudinally of the path of normal reciprocatory movement of the trigger member. This is effected by arranging the pivot t transverse to the path of rectilinear movement. The trunnion-block itself is, by preference, removably secured to the trigger-plate by screw-threaded stem t' and is locked against rotation by a pin t^2 , (see Figs. 3 and 8,) which passes into the trigger-plate and bears against the side of the block.

While I realize that the form of the detent might be considerably varied without departing from my broad invention, I prefer that it be given an angular shape, so as to lie adjacent the top and rear side of trunnion-block T, the horizontal arm d receiving the pivot t . The free forward end d' of this arm constitutes the detent proper and is arranged to fall behind rearward-facing shoulder m on the top

of the body portion of the trigger member when the latter has been advanced by the trigger-setting mechanism in the forward or setting direction to the initial position with lug R in releasing position with reference to releasing sear end s . For causing the automatic engagement of the detent with shoulder m a spiral spring d^2 is located in a horizontal rearward-opening spring-barrel d^3 , formed in trunnion-block T, so that the outer end of the helix bears against the depending arm d^4 of the detent and constantly tends to force the detent end d' downward.

The trigger-setting mechanism and the means for retaining the trigger member in its set position having been discussed, the means for actuating the trigger member in the reverse direction will now be considered. Formed in the body portion M^2 of the trigger member is a horizontal spring-barrel m' , opening forward through shoulder m^2 , formed at the junction of reduced portion M' and body portion M^2 of the trigger member, and in this barrel is housed a coiled spring m^3 , against which bears a piston m^4 , that abuts at its other end against the rear face of block B' . It will be readily apparent that during the forward setting movement of the trigger member spring m^3 will be compressed and will store up sufficient power to urge the trigger member to the limit of movement in the opposite direction.

The parts for effecting the escape of the trigger member from its initial releasing position (shown in Fig. 7) rearward will now be considered. This movement of the trigger member I have termed the "release-positioning" movement, as it carries the trigger member from the first to the second releasing position. In rear of shoulder m , preferably at the extreme rear end, the trigger member is provided with an upward-extending projection m^5 , which on the raising of the trigger member by the finger-trigger piece to effect hammer release contacts with arm d in rear of detent end d' and lifts the latter out of engagement with shoulder m . In order to adjust the height at which the projection m^5 removes the detent from engagement the projection is caused to contact with an adjustable pin d^5 in the form of a screw, passing down through arm d of the detent.

A second adjustable pin or screw d^6 , extending downward from arm d , is provided for arresting the movement of the trigger member after escaping from the initial releasing position, such stoppage being effected by projection m^5 contacting with the pin while the trigger member is still in an elevated position, as shown in Fig. 8. This pin d^6 and projection m^5 are of such length that when the trigger member is allowed to drop upon the trigger-plate and resume its normal movement the projection will pass under the pin, the moment at which this second escape is effected

being timed by the adjustment of pin d^6 . In front of projection m^5 a recess m^6 is provided on the top of the trigger member to receive pin d^6 and lock the trigger member against forward movement when the latter is elevated for hammer release at the second releasing position, as illustrated in Fig. 9.

The operation of the parts described will now be considered in detail. While the successive positioning of the releasing devices is shown as being made possible by arranging the ends of the hammer-sears substantially in transverse alinement, while the lugs R R' are out of transverse alinement, it is obvious that practically the same result may be obtained by positioning the hammer-sear ends out of transverse alinement and the lugs R R' in transverse alinement, or by giving the lugs any relative arrangement that would cause the hammer-releasing lugs to occupy releasing positions successively. On the actuation of the locking-bolt B the setting-lever forces the trigger member forward to its initial releasing position with lug R immediately beneath sear end s and lug R' below, but in advance of sear end s' . It may be observed that by describing the lug R' as in advance of sear end s' I do not refer to the relative positions of these parts in the lock-chamber, but merely to the fact that the lug is so disposed as to be in position to be brought under sear end s' by the driving-spring. In fact while I have shown the trigger member as moving rearward in the lock-chamber for release-positioning and forward for setting I do not consider it necessary to my invention that this arrangement shall be followed. In this position it is retained by the automatic action of the detent. Upon now applying pressure to the finger-trigger piece the trigger member is tilted, sear S is elevated with consequent hammer-release, and projection m^5 , contacting with arm d of the detent between its detent end and pivot, allows the trigger member to escape and commence its release-positioning movement. The quickness with which projection m^5 removes the detent from engagement is, of course, made possible by the fact that projection m^5 is farther from the center of vertical oscillation of the trigger member than shoulder m . As soon as the trigger member escapes lug R passes from under sear end s , allowing the latter to fall and removing the pressure of the sear from the finger, this being a feature of great importance, since it removes one factor tending to bring about double firing. The finger being still upon the finger-trigger piece and the trigger member elevated, the latter is stopped in the intermediate arrested position, with lug R' still in advance of sear end s' , by the engagement of projection m^5 and pin d^6 . By thus preventing the trigger member from passing immediately from the initial to the second releasing position doubling is again

guarded against. Even in case of accident, such as breaking of parts, should the trigger member escape to the rear prematurely while still in an elevated position the inclination of the forward face of the sear end s' and of the rear face of the lug R' would, in event of engagement of these faces, tend to bring about the depression of the sear rather than to elevate the latter. On removing the finger-pressure the trigger member resumes its release-positioning movement on the trigger-plate, passing under pin d^6 , and is arrested by trunnion-block T in the second releasing position, with lug R' immediately beneath sear end s' . Pressure applied to the finger-trigger piece will now move the trigger member again out of releasing position to released position, when, as pointed out, pin d^6 will prevent forward movement of the slide under the influence of recoil.

I shall now describe the means for preventing the release of the first hammer. Passing upward through the trigger member, with its upper end normally below and behind the shoulder m , is a pin E, whose lower end projects below the bottom of the trigger member and stands in a forward and upward inclined groove e , formed in a slide E', that has longitudinal movement in slot E² in the trigger-plate and projects sufficiently below this plate to give a finger-grip. As clearly shown in Fig. 4, pin E is slightly inclined upward and rearward, so as to avoid binding upon the walls of the passage in which it reciprocates. It will be readily understood that if at the initial releasing position when detent end d' of the detent is in engagement with shoulder m on the trigger member the slide E' is moved rearward pin E will be elevated so as to raise the detent clear of the shoulder. Since the trigger member is not elevated, it is free to resume its normal rearward movement till arrested by trunnion-block T at the second releasing position; but before or after the actuation of the trigger member to effect release of the second hammer the trigger member may be again moved in the direction of setting till the detent engages with shoulder m , the slide E' having meanwhile been returned to its normal forward position. After release of both hammers and before actuation of the trigger member in direction of setting should the slide E' be forced rearward and held by pressure of the finger the detent D will be prevented from engaging with the shoulder m , and at the conclusion of the setting movement the trigger member will pass immediately to the second releasing position. Thus the barrels may be discharged in the normal order of right, left. The right barrel may remain undischarged, or they may be fired in the order of left, right. In view of the difference in character of the two barrels of a shotgun, one being for distant objects and the other for close range, it will

be apparent that it is a matter of great practical importance to enable the discharge of either barrel at an instant's notice.

It will now be seen that it is a matter of great importance to prevent the forward movement of the trigger member under the influence of recoil after releasing the second hammer, for if the first or right hammer should be still cocked lug R might contact with lug s in such a manner as to raise the latter, and thus effect premature release. Even in case the trigger member should in some manner escape forward the face of lug R and the rear face of lug s are so inclined that, as in case of the other pair of lugs, the force of impact will be directed downward rather than upward.

In addition to the safeguards already described a safety device is provided that absolutely locks the parts of the trigger mechanism against operative movement at the initial releasing position. The forward portion of horizontal arm d of the detent is cut away on its upper surface, as at d' , so as to permit the elevation of the detent end d' sufficiently to clear the shoulder m in the trigger member without contacting with the depending safety-finger Y when the latter is in the normal position shown in full lines in Fig. 1. This safety-finger, however, is capable of longitudinal movement by means of a slide Y' projecting above the top plate L, and, as indicated in dotted lines in Fig. 1, may be shifted to the rear of its inoperative position, so that it will engage with the unreduced portion of the lever-arm d to prevent the lifting of detent end d' out of engagement with shoulder m or the elevation of the right hammer-sear.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a double-barrel gun, the combination with hammer-sears, of a single finger-trigger piece, of mechanism actuated by said finger-trigger piece to effect release of said sears successively and comprising a reciprocable member and a detent distinct from the sears, said detent being arranged to engage said member and to be moved out of engagement thereby under the actuation of the finger-trigger piece, and of setting means for moving the member in one direction into initial releasing position where it is held by the detent, said member being movable in the opposite direction toward second releasing position on disengagement of the detent.

2. In a double-barrel gun, the combination with hammer-sears, of mechanism for effecting release of said sears successively, comprising a reciprocable member and a detent distinct from the sears, of setting means for moving said member in one direction into first releasing position, where it is held by said detent, a single finger-trigger piece ar-

ranged to actuate said member simultaneously to move the detent out of engagement and to bring about first sear release, and means for urging the member to travel in the opposite direction toward second releasing position where it is operable by the finger-trigger piece to releasably engage the unreleased sear.

3. In a double-barrel gun, the combination with hammer-sears, of a reciprocable member movable in one direction into initial releasing position and in the opposite direction to enable it to occupy releasing positions with reference to the sears successively, a detent distinct from the sears for retaining the member in initial releasing position, and single manual means for actuating the member to releasably engage the sears, said member being arranged to disengage the detent under the actuation of said manual means.

4. In a double-barrel gun, the combination with the hammers, of mechanism vertically movable to bring about release of said hammers successively and comprising a horizontally-reciprocable slide and a horizontally-pivoted detent overlying said slide, said detent having an engaging tip arranged to detainingly engage with the slide and said slide having a detent-disengaging region arranged on vertical movement of the slide to contact liftingly with the detent between pivot and tip, of setting means for moving the slide in one direction into initial releasing position where retained by said detent, the slide after disengagement of the detent being movable toward second releasing position in a direction opposite to the setting movement.

5. In a double-barrel gun, the combination with the hammers, of mechanism vertically movable to bring about hammer release successively and comprising a horizontally-reciprocable slide and a horizontally-pivoted detent overlying said slide, said detent having an engaging tip arranged to detainingly engage with the slide and a depending adjustable pin disposed intermediate the pivot and tip, and said slide having a detent-disengaging region arranged on vertical movement of the slide to contact liftingly with said pin, of setting means for moving the slide in one direction into initial releasing position where retained by said detent, the slide after disengagement of the detent being movable toward second releasing position in the direction opposite to the setting movement.

6. In a double-barrel gun, the combination with the hammer-sears, of a horizontally-reciprocable slide capable of pivotal movement about a horizontal axis and arranged to occupy releasing positions with reference to said sears successively, a horizontally-pivoted detent overlying said slide and having an engaging tip, setting means for moving the slide in one direction into first releasing

position, and actuating means arranged to elevate the latter at releasing positions to bring about sear release, the slide being provided with a shoulder engaged by the tip of the detent at first releasing position and with a detent-disengaging region located farther from the horizontal axis than said shoulder and arranged on vertical movement of the slide to contact liftingly with the detent between pivot and tip, the slide after disengagement of the detent being arranged to move to second releasing position in the direction opposite to the setting movement.

7. In a single-trigger mechanism, the combination of a member adapted to occupy releasing positions successively, a detent, setting means for moving said member in one direction into first releasing position where it is held by said detent, actuating means operative at releasing positions to elevate said member to bring about hammer release and also operative at first releasing position to disengage said detent, means for urging said member to travel in the direction opposite to the setting movement toward second releasing position, and means carried by the detent operative during the elevation of the member at first releasing position to prevent said member assuming second releasing position.

8. In a single-trigger mechanism, the combination of a horizontally-reciprocable slide movable in one direction into first releasing position and in the opposite direction into second releasing position, a horizontally-pivoted detent overlying said slide and having an engaging tip arranged automatically to engage and detain the slide at first releasing position, actuating means arranged to elevate the same at releasing positions to bring about hammer release, said slide being provided with a detent-disengaging region arranged to contact liftingly with the detent between pivot and tip during elevation at first releasing position, and a stop depending from the detent and arranged to arrest the slide in advance of second releasing position during such elevation.

9. In a single-trigger mechanism, the combination of a horizontally-reciprocable slide movable in one direction into first releasing position and in the opposite direction into second releasing position, a horizontally-pivoted detent overlying said slide and having an engaging tip arranged automatically to engage and detain the slide at first releasing position, actuating means arranged to elevate the same at releasing positions to bring about hammer release, said slide being provided with a detent-disengaging region arranged to contact liftingly with the detent between pivot and tip during elevation at first releasing position, and an adjustable pin depending from the detent and arranged to arrest the slide in advance of second releasing position during such elevation.

10. In a single-trigger mechanism, the combination of a horizontally-reciprocable slide movable in one direction into first releasing position and in the opposite direction into second releasing position, a horizontally-pivoted detent overlying said slide and having an engaging tip arranged to automatically engage and detain said slide at first releasing position, actuating means arranged to elevate the same at releasing positions to bring about hammer release, said slide being provided with a detent-disengaging region arranged to contact liftingly with the detent between pivot and tip during elevation at first releasing position, and a stop depending from the detent and arranged to arrest the slide in advance of second releasing position during such elevation, said slide being provided on its upper surface with a recess to receive said stop during elevation at second releasing position.

11. In a single-trigger mechanism, the combination of a horizontally-reciprocable slide movable in one direction into first releasing position and in the opposite direction into second releasing position, a horizontally-pivoted detent overlying said slide and having an engaging tip arranged to automatically engage and detain the slide at first releasing position, said detent being further provided between pivot and tip with a longitudinally-disposed pair of depending adjustable pins, and actuating means arranged to elevate the same at releasing positions to bring about hammer release, said slide being provided with a detent-disengaging region arranged during elevation at first releasing position to contact with the bottom of the first pin to disengage the detent and then with the side of the second pin to arrest the slide temporarily in advance of second releasing position.

12. In a single-trigger mechanism, the combination of a horizontally-reciprocable slide movable in one direction into first releasing position and in the opposite direction into second releasing position, a horizontally-pivoted detent overlying said slide and having an engaging tip arranged to automatically engage and detain the slide at first releasing position, said detent being further provided between pivot and tip with a depending adjustable pin and between pivot and pin with a depending stop, and actuating means for elevating the slide at releasing positions to bring about hammer release, said slide being provided with a detent-disengaging region arranged during elevation at first releasing position to contact liftingly with said pin, the slide being then temporarily arrested by the stop in advance of second releasing position.

13. In a double-barrel gun, the combination with hammer sears provided with projections raisable to effect hammer release, of

mechanism for effecting release of said sears successively including a reciprocable member provided with a releasing-lug, said member being movable in one direction to position said lug in advance of the projection on the second released sear and in the opposite direction to bring said lug beneath said sear projection without engagement therewith, the opposed faces of the lug and sear end transverse to the path of movement being formed on an inclination to tend to depress the sear in event of engagement during the release positioning movement.

14. In a double-barrel gun, the combination with hammer sears provided with projections raisable to effect hammer release, of mechanism for effecting release of said sears successively including a reciprocable member provided with a releasing-lug, said member being movable in one direction to position said lug beneath the projection on the first-released sear and in the opposite direction to position said lug in rear of said sear projection, the opposed faces of the lug and sear end transverse to the path of movement being formed on inclination to tend to depress the sear in event of engagement under the influence of recoil.

15. In a single-trigger mechanism, the combination with a slide having a shoulder on its upper surface and movable in one di-

rection into first releasing position and in the return direction into second releasing position, actuating means for causing said member to bring about hammer release at releasing positions, an automatic detent arranged to detainingly engage with the shoulder on the slide at first releasing position, a pin passing up through the slide behind said shoulder, and manually-operated means for elevating said pin to lift the detent out of engagement.

16. In a single-trigger mechanism, the combination of a slide having a shoulder on its upper surface and movable from first to second releasing positions and return to first releasing position, actuating means for causing said member to bring about hammer release at releasing positions, an automatic detent arranged to detainingly engage with the shoulder on the slide at first releasing position, a pin passing up through the slide behind said shoulder, and a manually-operated slide having an inclined surface for receiving and elevating said pin to lift the detent out of engagement.

In testimony whereof I affix my signature in the presence of two subscribing witnesses.

JOHN D. RUSS.

Witnesses:

V. F. BRANDENBURG,
E. T. BRANDENBURG.