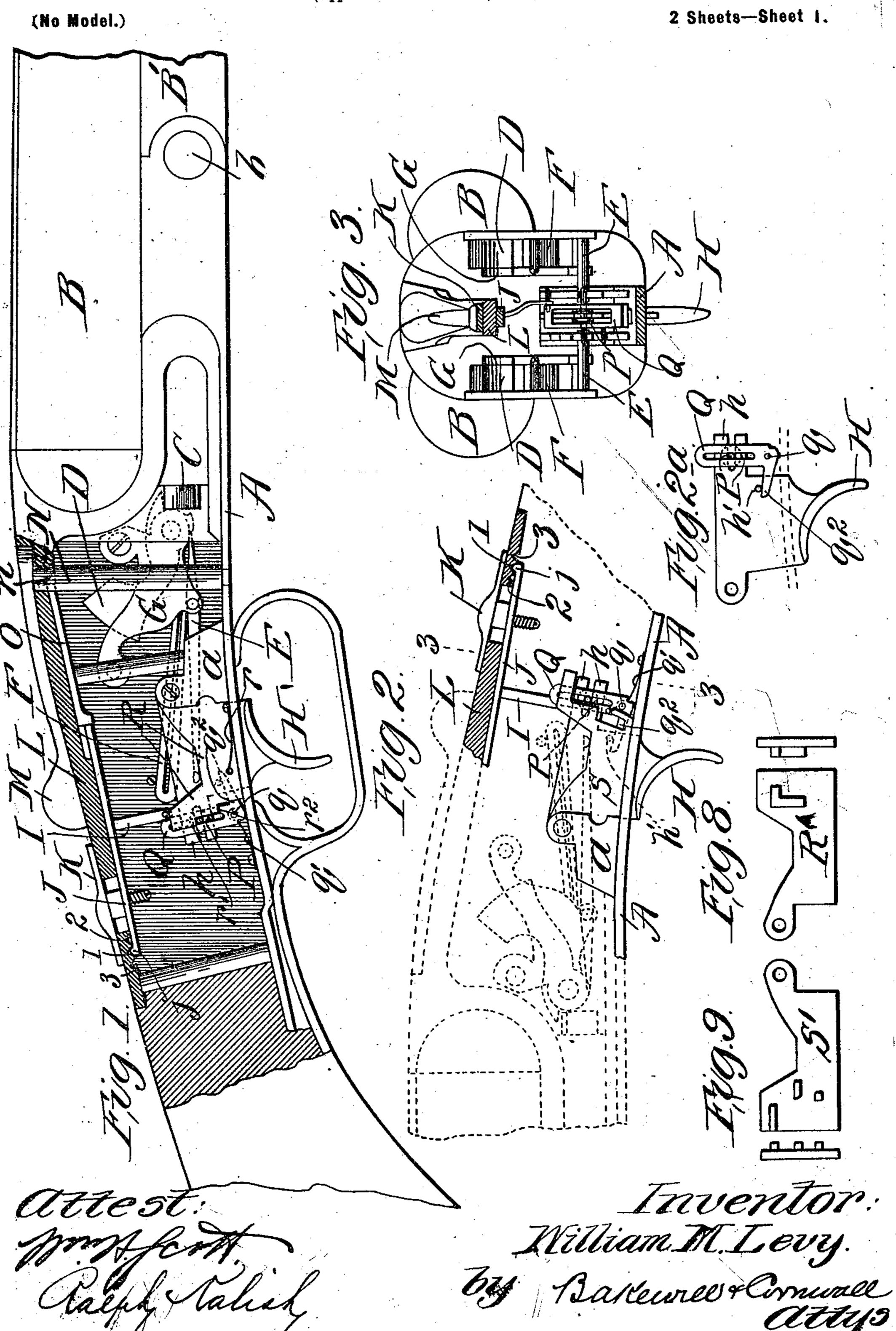
#### W. M. LEVY.

#### SINGLE TRIGGER MECHANISM FOR BREAKDOWN GUNS.

(Application filed Mar. 22, 1900.)

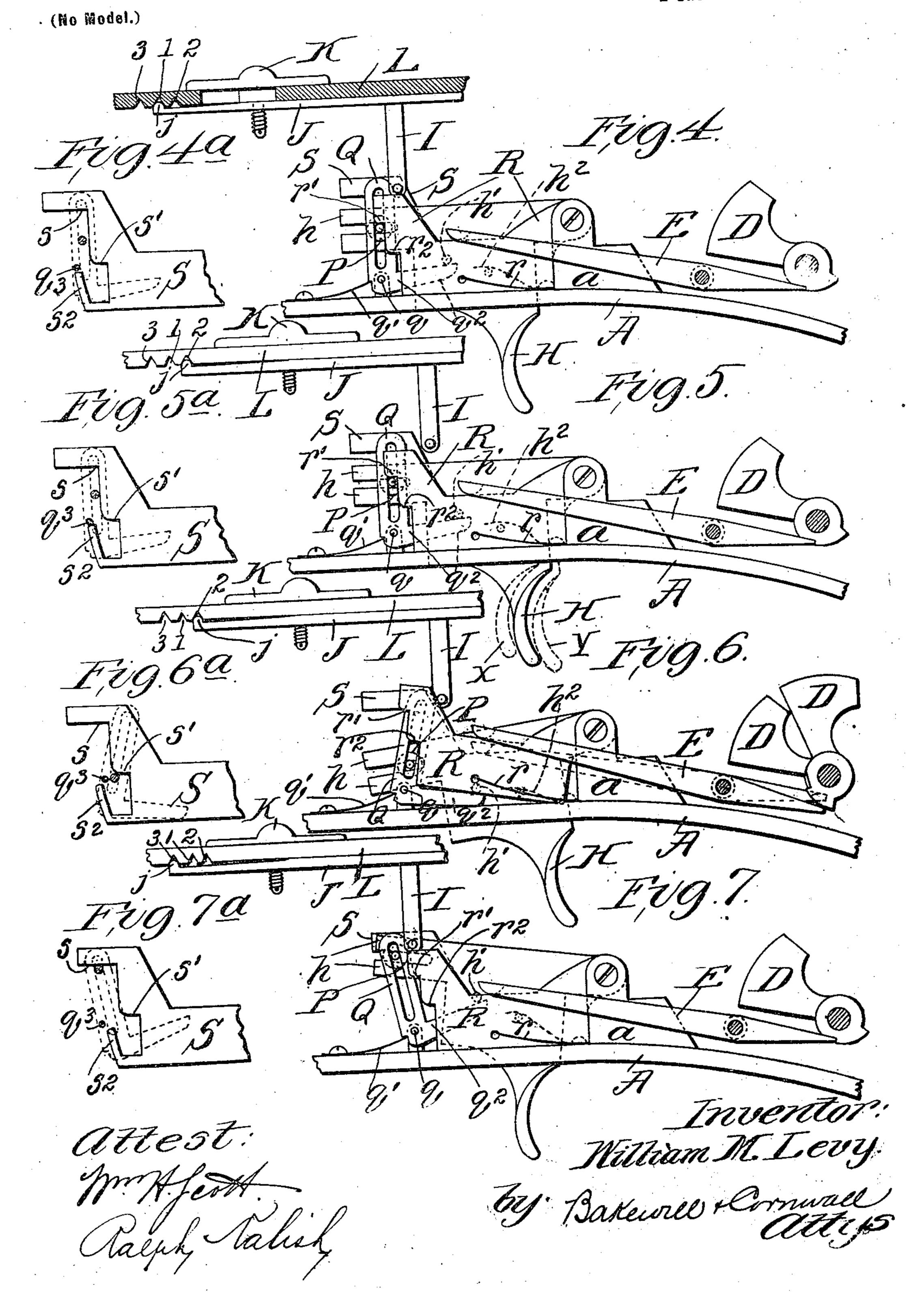


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2 Sheets—Sheet 2.



# UNITED STATES PATENT OFFICE.

WILLIAM M. LEVY, OF ST. LOUIS, MISSOURI.

### SINGLE-TRIGGER MECHANISM FOR BREAKDOWN GUNS.

SPECIFICATION forming part of Letters Patent No. 656,822, dated August 28, 1900.

Application filed March 22, 1900. Serial No. 9,730. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM M. LEVY, a citizen of the United States, residing at the city of St. Louis, State of Missouri, have invented a certain new and useful Improvement in Single-Trigger Mechanism for Breakdown Guns, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevational view, partly in section, of a portion of a gun operating 15 with my improved single-trigger mechanism. Fig. 2 is an elevational view of the single-trigger mechanism as seen from the opposite side, the firing mechanism being shown in dotted lines. Fig. 2a is an elevational view of the 20 single trigger and its cooperating rocking frame. Fig. 3 is a cross-sectional view on line 33, Fig. 2. Figs. 4 to 7, inclusive, are diagrammatic views, in side elevation, of my improved single-trigger mechanism, showing the 35 apparatus in different positions. Figs. 4a t 7a, inclusive, are detail views of one of the tumblers, showing its position relative to the near tumbler illustrated in Figs. 4 to 7, respectively. Fig. S is a side elevational and o rear view of a modified form of tumbler, and Fig. 9 is a similar view of the tumbler designed to cooperate with the one illustrated in Fig. 8.

This invention relates to a new and useful improvement in single-trigger mechanisms for guns having a plurality of barrels, the object being to enable the operator to successively release or trip the firing mechanism by the manipulation of a single mechanism in the form of a trigger, or by the provision of suitable means said single-trigger mechanism may be confined to the control of a single-firing mechanism.

The object of my present invention is to take care of the involuntary pull on the trigger occurring immediately after the discharge of a shell or cartridge from one barrel, which involuntary pull might result in firing the second barrel in quick succession.

With this object in view my invention con-

sists in the novel construction, arrangement, and combination of the several parts, all as will hereinafter be described and afterward pointed out in the claims.

In the drawings I have shown in Figs. 1, 2, 55 and 3 my improved single-trigger mechanism as applied to a well-known form of firing mechanism, which latter is illustrated solely for the purpose of showing the application of my device to a well-known construction; but it 60 will be obvious to those skilled in the art to which my invention relates that the improved single-trigger mechanism hereinafter described can be applied to any form of firing mechanism, and therefore I do not wish to be 65 understood as limiting myself to the particular form of firing mechanism shown.

In the drawings, A indicates what is known as the "frame;" B, the barrels; B', the foreend carrying the barrels, which are pivoted 70 to the forward end of the frame A at b; C, the lifter arranged on the rearend of the cocking-shaft, (not shown;) D, the hammer; E, the sear; F, the mainspring; G, the bridle; H, the 'igger; I, the safety-stud; J, the slide; 75 K, the thumb-piece, and L the tang. All of said parts, with the exception of the safety-stud, are practically of the usual and well-known construction of the firearm commonly called "double-barrel hammerless shotgun." 80

The general construction and operation of a double-barrel hammerless shotgun are well understood, and a detailed description here is hardly necessary, but for purposes of explanation may be briefly described as follows: 85 The gun shown is of the breakdown type, and upon the release of the barrel-locking mechanism by the manipulation of the top lever M the barrels swing on the pivot b, which, in addition to actuating the ejecting mechanism 90 in general, also sets in motion the cocking mechanism, of which the lifter C, cooperating with the forwardly-projecting ends of the hammer D, forms a part. The barrellocking lever and post N, which is rotated 95 when the gun is thus broken through the instrumentality of the cam projection n on its upper end engaging with a slide O, fitted in a groove under the tang and abutting at its rear end against the slide J, forces said 100

slide J rearwardly, and with it its attached thumb-piece K, so that the tooth j on the rear end of this slide passes out of a notch, which I will mark 2, in the tang and into a notch 5 which I will mark 1. A third notch 3, behind the notch 1, for cooperating with the tooth j and in another position of the parts will be hereinafter described. The shells are now introduced into the breech of the gun to and the barrels closed. In the mechanism heretofore used, which employ the essential characteristics of the several parts above mentioned, two triggers were employed, one for each firing mechanism, and in the posi-15 tion where the tooth j was forced into notch 1 those triggers were locked against movement, and to unlock the triggers it was necessary to move the thumb-piece K forwardly. into notch 2, which upon the gun being 20 broken would result in the automatic restoration of this device. If, however, the tooth was moved rearwardly into engagement with the notch 3, this device would be thrown beyoud the limit of movement of the slide O and 25 would not be actuated thereby upon the breaking of the gun, and in such third position the gun can be loaded and fired without moving the thumb-slide K, this position of the thumbslide being what is known as the "independ-30 entsafety" position. The top lever M, hereinabove referred to, or a similar device designed to be manually operated for unlocking the barrels of the gun and permitting the gun to be broken may be designated as the "barrel-35 locking" mechanism, as the said top lever or its equivalent directly controls the locking device employed for holding the barrels of the gun in a closed position. This being the general design and operation of the gun 40 shown in Fig. 1, although, as stated before, I do not wish to be understood as limiting my improvement in its application to a gun having these general characteristics, nor, indeed, to the type of gun shown, as it can as well 45 be applied to three-barrel guns or hammergans or any other form of firearms, I will now describe the construction and operation of my improved trigger mechanism used in connection therewith.

a indicates a pivot-block upon which the trigger II is pivotally mounted, said trigger being provided with a slotted extension h at its rear end, in which slotted extension is mounted a roller P, said roller having flanges 55 on each side of the slotted extension, (see Fig. 3,) while the spindle of said roller extends laterally on each side of the trigger some distance, so as to engage with shoulders or projections on the tumblers, to be hereinafter de-60 scribed.

Q indicates a rocking frame which is pivoted at q to a block extending up from the 65 bers in or between which extends the slotted | the tumbler R, and the gun is in a safe con-

before stated, carries the roller P, whose spindle extends laterally, and these lateral extensions of this spindle pass through slots in the vertical members of the rocking frame, 70 as shown. A spring q' cooperates with this frame to hold the same in a forward position at all times, while from the lower or pivoted end of said frame extends a finger  $q^2$ , designed to cooperate with a pin or lateral projection 75 h' on the single trigger.

R indicates a tumbler, which for purposes of explanation we will designate as the tumbler coöperating with the firing mechanism for the right barrel, and S indicates a tum- 80 bler for cooperating with the firing mechanism of the left barrel. These tumblers are pivoted at their forward ends on the trigger pivot-bolt for the sake of convenience, but it. is obvious that they can be mounted in a dif- 85 ferent manner, so that they will be properly actuated in their respective movements. These tumblers cooperate, respectively, with the tailpieces of the sears for the right and left firing mechanism, and, as shown in Figs. 90 4 to 7, these sears cooperate with shoulders on the hub portions of the hammers, the sear for the right firing mechanism so cooperating with the hammer for said mechanism that when the rear end of said sear is elevated 95 upon the elevation of its actuating-tumbler the hammer will be released, so as to move forward under the impulse of its mainspring to deliver a firing blow, and when in this forward position the forward end of the sear, 100 still coöperating with the hub of the hammer, will be depressed by reason of an eccentric or cam-face formation on the hammer-hub, so that the rear end of the sear will be elevated to permit its actuating-tumbler to oc- 105 cupy a position different from that which it occupied before said tumbler was moved by the trigger. The same condition may be true with respect to the sear of the left firing mechanism; but it is not essential.

The tumbler R, shown in the drawings as pivoted at its forward end, coöperates with a spring r, whose tendency is to cause said tumbler to occupy an elevated position at all times. Of course when the hammer is re- 115 tracted or in a firing position the rear end of its cooperating sear is depressed, so that the tumbler R occupies a lowered or depressed position. The rear end of the tumbler R carries two shoulders or projections r' and  $r^2$ , be-120 tween which there is a suitable distance which is utilized to take care of the involuntary pull by the movement of the spindle of the roller P passing from engagement with the shoulder r' to a position beneath the shoulder  $r^2$ , 125 as will hereinafter be described. In the normal position of the tumbler R, as shown in Fig. 4, the spindle of the roller P engages the tang. The vertical portion of this frame is | shoulder r', and in this normal or first posiprovided with a slet or formed with two mem- | tion of the mechanism the stud I also engages 130 portion of the trigger. The trigger-slot, as I dition, the tumbler S being locked in a safe

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position by mechanism independent of the safety-stud, as will hereinafter be described. Fig. 4 shows the apparatus in a safe position, and the tooth j is in notch l. If it is 5 desired to fire the right and left barrels successively upon successive operations of the trigger, the slide J is slid forward to disengage the stud I from the tumbler R and the rocking frame Q, as shown in Fig. 5. If the 10 trigger is pulled when the parts are in this position, the spindle of the roller P being under the shoulder r' will elevate the tumbler R, which carries with it the sear, to release the firing mechanism of the right barrel. When the right sear is elevated, it is held in such position by its spring r, and its cooperating sear is likewise held in an elevated position, as shown in Fig. 6. A spring  $h^2$ forces the trigger forward, and the spring  $q^\prime$ 20 causes the spindle of the roller P to hug the tumbler R until said spindle moves under the shoulder r<sup>2</sup> and permits said rocking frame to move forward to an abnormal position, depressing its forward member  $q^2$  and permit-25 ting the trigger to move to an abnormal forward position, which is limited by the pin h'contacting with the arm  $q^2$  of the rocking frame Q. In fact, the trigger-spring forces the trigger to an abnormal forward position 30 under the circumstances above described, and even if the spring q' is omitted the projection  $h^2$  on the trigger will force the frame Q forward. The rearmost position of the trigger is indicated by the dotted lines X in 35 Fig. 5, the normal position is shown by the full lines, and the abnormal forward position of the trigger is shown by dotted lines in the same figure at Y, which abnormal position is likewise shown by full lines in Fig. 6. It 40 will thus be seen that the movement of the trigger from its position indicated at X to the position indicated at Y is sufficient to take care of any involuntary pull due to the discharge of the firing mechanism controlled 45 by the tumbler R, and, further, that in effecting this movement from X to Y the trigger is out of operative relation to tumbler S, so that a full release of the trigger is necessary before the left barrel can be fired, and pend-50 ing the absolute or full release of the trigger, permitting it to reach the limit of its abnormal forward movement, the tumbler S is locked in position. The full release of the trigger is accomplished only after the spindle 55 of the roller P passes under the shoulder s', which occupies a position relative to the trigger lower than the position the shoulder r'occupied when the tumbler R was in its lowermost position. In other words after the 60 trigger is moved rearwardly to elevate the tumbler R said trigger has to move forward a greater distance to enable the spindle of the roller P'to pass under the shoulder s' before the tumbler S can be released or the trig-65 ger engaged therewith. When the trigger moves forward beyond its normal position |

and the rocking frame Q rocks forward, the tumbler S is released and the trigger is thrown into engagement therewith, so that the first movement of the trigger, if said trigger is 70 pulled after it reaches its abnormal position, will be to directly effect the elevation of the tumbler S, and thus dispense with a "drag" or lost motion. As shown in Figs. 4a to 7a, the tumbler S is provided with two shoulders 75 s and s' and a locking-finger s2, with which finger a projection  $q^3$  on the rocking frame Qcooperates when said frame is in its normal position to prevent the tumbler S from being elevated. In elevating the tumbler R the 80 spindle of the roller P is made to move under the shoulder s, and even though the spindle contacts with said shoulder the tumbler S will not be raised, because the projection  $q^3$  is over the locking-finger s2. However, when the 85 tumbler R has been elevated and the spindle of the roller P permitted to occupy a position under the shoulder s' to permit the rocking frame Q to move forward the projection  $q^3$  is moved out of the path of the finger s2, as 90 shown in Fig. 6a, and the spindle of the roller P moves under the shoulder s'. The trigger is now in its abnormal forward position and the spindle of the roller P in contact with the shoulder s', so that upon the first pull of the 95 trigger the tumbler S will be elevated to raise the rear end of the left sear, which results in releasing the hammer of its controlled firing mechanism. When the gun is broken, the tumblers are depressed, the safety-stud I 100 locks the tumbler R in its lowermost position, and the projection q<sup>3</sup> on the frame Q locks the tumbler Sin its lowermost position. When the safety-stud is moved forward to release the tumbler R, the right barrel may be fired, 105 the tumbler for the firing mechanism of the left barrel being locked in position by the  $pin q^3$  until the right barrel has been fired and the trigger moves to an abnormal forward position, the length of said movement of the 110 trigger, as indicated by the dotted positions X and Y in Fig. 5, and the time required for the trigger to move this distance being sufficient to take care of any involuntary pull which may result from the recoil of firing the 115 right barrel. The trigger therefore must have a full release after the right barrel has been fired before the left can be fired, the final. movement of the trigger to its abnormal forward position unlocking the tumbler of the 120 firing mechanism for the left barrel and so engaging the trigger with said tumbler that the trigger does not drag or lose motion, but its first movement positively and directly elevates the tumbler S. 125

In devices of this character it is desirable that provision be made whereby the left barrel can be fired separately, rendering it unnecessary to operate the mechanism for the right barrel previous to the pull of the trigger for firing the left barrel. In order to accomplish this, the slide J is moved so that its

finger will occupy notch 3 in the tang, in which | I claim, and desire to secure by Letters Patposition the safety-stud I still engages and locks the tumbler R against movement. When the safety-stud occupies this rear posi-5 tion, it engages the upper end of the rocking frame C and moves said frame rearwardly, so that the spindle of the roller P is moved out of engagement with the shoulder r'; but said spindle still occupies a position under the to shoulder s. This rearward position of the rocking frame Q also carries the projection  $q^3$ out of the path of the finger s2, (see Fig. 7a,) so that when the trigger is pulled under these conditions the spindle of the roller P will en-15 gage the shoulder s and elevate the left sear, the trigger moving rearwardly an abnormal distance to effect this. As long as the tooth of the slide J is in the rearmost notch the tumbler R is locked in its depressed position 20 (see Fig. 7) and the right barrel cannot be fired; but the left barrel can be loaded and fired as many times as desired. Should it be

desired to fire the left barrel first and then the right barrel, the slide is moved to the rear-25 most notch, the left barrel fired, and then the slide moved to the foremost notch in order that the right barrel may be fired. Of course when the slide cooperates with the rearmost notch it is beyond the control of the sliding 30 piece O and so remains in its rearmost position at all times.

In Figs. 8 and 9 I have shown a modification of the tumblers R and S, marking the same R' and S', in which it will be seen that 35 the tumblers are provided with lateral projections, forming stops or shoulders corresponding to the shoulders of the tumblers shown in the other figures of the drawings, and the spindle for the roller P, which coop-40 erates with the projections on the tumblers R' and S' is of such length that it operates within the limits of the inside faces of said tumblers and does not project laterally therebeyond, as in the other form of tumblers 45 hereinbefore described.

While I have described the construction illustrated in the accompanying drawings in such manner that the tumbler R, which might be termed the "primary tumbler," is identi-50 fied with the right barrel of the gun and the tumbler S, which might be termed the "secondary tumbler," is identified with the left barrel, it will be obvious that the position of these tumblers can be reversed, so that the 55 left barrel will be the first fired and the right the second. It will also be obvious that instead of having a tumbler on each side of the trigger both of the tumblers can be on the

same side. 60 I am aware that minor changes in the construction, arrangement, and combination of the several parts of my device can be made and substituted for those herein shown and Jdescribed without in the least departing from

65 the nature and principle of my invention. Having thus described my invention, what |

ent, is——

1. The combination with a plurality of firing mechanisms, of a single trigger therefor, 70 independently-operable tumblers interposed between said trigger and said firing mechanisms, a shiftable device in engagement with the trigger and in position to engage at least one of said tumblers at all times, and mech- 75 anism for moving the trigger to an abnormal forward position upon the operation of one of said tumblers, substantially as described.

2. The combination with a plurality of firing mechanisms in which are included ham- 80 mers and sears, of a single trigger common to all of said mechanisms, independently-operable tumblers for operating the different. sears, means for engaging the single trigger successively with the different tumblers, and 85 means for moving the trigger to an abnormal forward position upon the operation of one of said tumblers, substantially as described.

3. The combination with a plurality of firing mechanisms in which are included ham- 90 mers and sears, of a single trigger common to all of said mechanisms, independently-operable tumblers coöperating with said sears and said trigger, an adjustable safety-stud cooperating with one of said tumblers, and a 95 rocking frame cooperating with the other of said tumblers, said rocking frame being in the path of said safety-stud, whereby, when said safety-stud is moved to rock said frame it releases the tumbler formerly locked by 100 said frame, said safety-stud remaining in cooperative relation with its respective tumbler, and locking the same against movement; substantially as described.

4. The combination with a plurality of fir- 105 ing mechanisms in which are included hammers and sears, of a single trigger common to all of said mechanisms, independently-operable tumblers cooperating with said sears and said trigger, a shiftable device in engage- 110 ment with the trigger and in position to engage at least one of said tumblers at all times, a rocking frame cooperating with said shiftable device, and a safety-stud for cooperating with one of said tumblers and said rock- 115 ing frame, whereby, when said safety-stud is out of engagement with said tumbler the successive operation of the trigger will successively operate the different firing mechanisms, and when said safety-stud is in engage- 120 ment with its respective tumbler and the rocking frame, the said tumbler and its associate firing mechanism are locked against movement, and the remaining tumbler is released, so that its associate mechanism may 125 be operated; substantially as described,

5. In a breakdown gun, the combination with the barrel-locking mechanism, of a slide which is capable of being thrown out of engagement with said mechanism, a stud or 130 projection carried by said slide, a plurality of independently-movable tumblers formed

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with shoulders or recesses, with one of which tumblers said slide stud or projection coopers. ates, a single trigger, a rocking frame, and a roller mounted in said trigger provided with 5 a spindle for cooperating with said rocking frame and said tumblers, substantially as described.

6. The combination with a hammer carrying means for elevating the rear end of its 10 sear, of a sear, a tumbler for disengaging the sear from the hammer, a spring for holding the tumbler in an elevated position after the sear trips the hammer, a trigger, a shiftable. device carried by said trigger for engaging. 15 the trigger with the tumbler, a rocking frame with which said shiftable device cooperates a secondary tumbler which is designed to be engaged by the shiftable device after the first tumbler is operated, and means on the rock-20 ing frame for locking the secondary tumbler against movement during the operation of the first tumbler, substantially as described.

7. The combination with a slotted trigger, of a roller mounted in the slot thereof, a slotted 25 rocking frame for embracing said roller and through the slot in which the spindle of said roller passes, tumblers provided with shoulders with which the spindle of said roller cooperates, and firing mechanisms controlled by 30 said tumblers, substantially as described.

8. The combination with a firing mechanism, of a trigger, a tumbler common to said trigger and said firing mechanism, and a shiftable device carried by the trigger for cooper-35 ating with said tumbler, said tumbler being provided with shoulders r' and  $r^2$ , cooperating with the said shiftable device; substanlially as described:

9. The combination with a firing mechan-4c ism, of a trigger for operating the same, a tumbler common to said trigger and said firing mechanism, a shiftable device carried by said trigger for cooperating with said tumbler, a recking frame with which said shift-45 able device also coöperates, said tumbler being provided with shoulders s and s' for cooperating with said shiftable device, and a projection on the rocking frame for cooperating with a locking-finger s2 on the tumbler, 50 substantially as described.

10. The combination with a plurality of firing mechanisms including hammers and sears, of means for holding one of said sears after its actuating mechanism has been re-55 leased in a position different from that occupied by said sear before its actuating mechanism was released, so that another firing mechanism can be operated only after the. sear reaches its last-mentioned position, a ée single-trigger mechanism common to all of said firing mechanisms, and means for moving the single trigger to an abnormal forward position to operate said last-mentioned firing mechanism successively, substantially as de-05 scribed.

11. The combination with a plurality of firing mechanisms including hammers and

sears, of independently operable tumblers movable with the different sears, means for holding one of said sears and its cooperating 70 tumbler in a position after the release of the firing mechanism controlled thereby different from that occupied by said sear and tumbler before said mechanism was released, whereby the other mechanism can be fired 75 only after the sear and tumbler first mentioned are operated and their position changed, a single trigger cooperating with said tumblers and their associate sears, and means for moving said trigger to an abnor- 80 mal forward position after the operation of the first firing mechanism and into position to operate the second-mentioned firing mechanism, substantially as described.

12. The combination with a plurality of fir- 85 ing mechanisms, of independently-operable tumblers for controlling the same, manuallyoperable devices for locking one of said tumblers in position and releasing the other of said tumblers, a trigger, and a shiftable de- 90 vice carried by the trigger and designed to engage the released tumbler only when the trigger is moved to an abnormal position to the rear, substantially as described.

13. The combination with a single trigger, 95 of a shiftable device carried thereby, a rocking frame in engagement with said shiftable device, independently-operable tumblers adapted to be engaged by said shiftable device, and manually-operable means for lock- 100 ing one of said tumblers in position and engaging said rocking frame to release the other tumbler and place the shiftable device of the trigger in position to operate said released tumbler, substantially as described.

14. In a single-trigger mechanism, the combination with a plurality of independently. operable tumblers, of a single trigger, devices carried by said trigger for successively engaging said tumblers, means for moving the 110 trigger to an abnormal forward position when one of said tumblers has been operated, and means for preventing said trigger from occupying an operative relation to the last tumbler to be operated until said trigger has 115 reached the limit of its abnormal forward movement, substantially as described.

15. The combination with a plurality of independently-operable tumblers, of a single trigger, a shiftable device on said trigger for 120 successively engaging the tumblers, and means for moving the trigger to an abnormal forward position after the first of said tumblers has been operated, said means releasing the other of said tumblers and causing the 125 shiftable device on the trigger to assume a position to directly engage the released tumbler upon the next pull on the trigger when in its abnormal forward position, substantially as described.

16. In a breakdown gun, the combination with the barrel-locking mechanism, of a plurality of firing mechanisms, a plurality of independently-operable tumblers, a single trig-

ger, a shiftable device engaging the trigger and designed to engage all of the tumblers at different times, means operated by the barrel-locking mechanism for locking all of the 5 tumblers and single trigger against movement, and a manually-operable device for unlocking one of the tumblers and the single

trigger, substantially as described.

17. In a breakdown gun, the combination 10 with the barrel-locking mechanism, of a plurality of firing mechanisms, a plurality of independently-operable tumblers, a single trigger, a shiftable device engaging the trigger and designed to engage all of the tumblers at 15 different times, a rocking frame coöperating with the shiftable device on the trigger, means on said frame for locking one of said tumblers against movement, and means operated by the barrel-locking mechanism for locking 20 the other of said tumblers and single trigger against movement, substantially as described.

18. In a breakdown gun, the combination with the barrel-locking mechanism, of a plurality of firing mechanisms, a plurality of in-25 dependently-operable tumblers, a single trigger, a shiftable device engaging the trigger and designed to engage all of the tumblers at different times, a rocking frame coöperating with the shiftable device on the trigger, means 30 on said frame for locking one of said tumblers against movement, and means operated by the barrel-locking mechanism for locking the other of said tumblers and single trigger against movement, said means also cooperat-35 ing with the rocking frame to actuate the this 20th day of March, 1900. same to release the single trigger and the tumblers theretofore locked by said rocking frame, said means still locking the other tumbler against movement, substantially as de-

40 scribed.

as described. In testimony whereof I hereunto affix my

19. In a breakdown gun, the combination with the barrel-locking mechanism, of a plurality of firing mechanisms in which are included hammers and sears, a single trigger common to all of said mechanisms, independ- 45 ently-operable tumblers for operating the different sears, means for engaging the single trigger successively with the different tumblers, means for moving the trigger to an abnormal forward position upon the operation 50 of one of said tumblers, and mechanism operated by the barrel-locking mechanism for restoring the trigger from its abnormal forward position to its normal position, substantially as described.

20. In a breakdown gun, the combination with the barrel-locking mechanism, of a plurality of firing mechanisms in which are included hammers and sears, a single trigger common to all of said mechanisms, independ- 60 ently-operable tumblers for operating the different sears, means for engaging the single trigger successively with the different tumblers, means for moving the trigger to an abnormal forward position upon the operation 65 of one of said tumblers, and mechanism operated by the barrel-locking mechanism for restoring the trigger from its abnormal for-

ward position to its normal position, said mechanism also locking the several tumblers 70 and trigger against movement, substantially

signature, in the presence of two witnesses,

Witnesses: WM. II. SCOTT, RALPH KALISH