

No. 858,581.

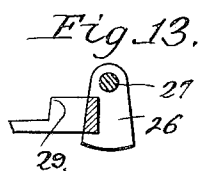
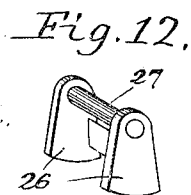
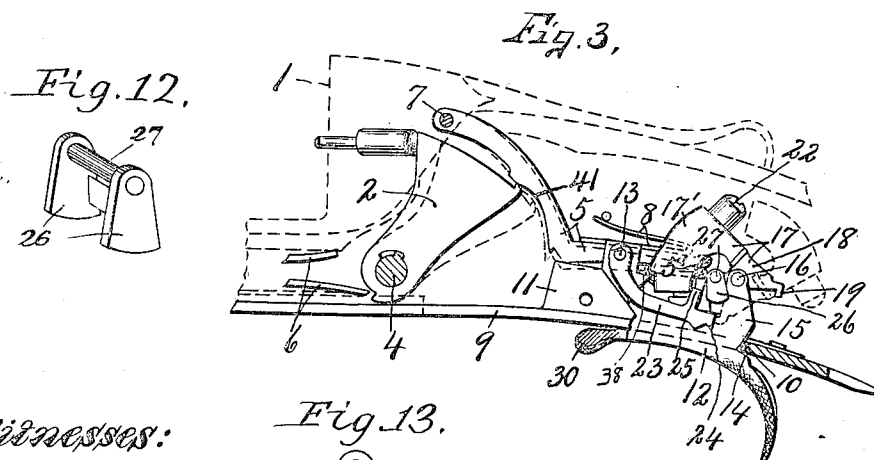
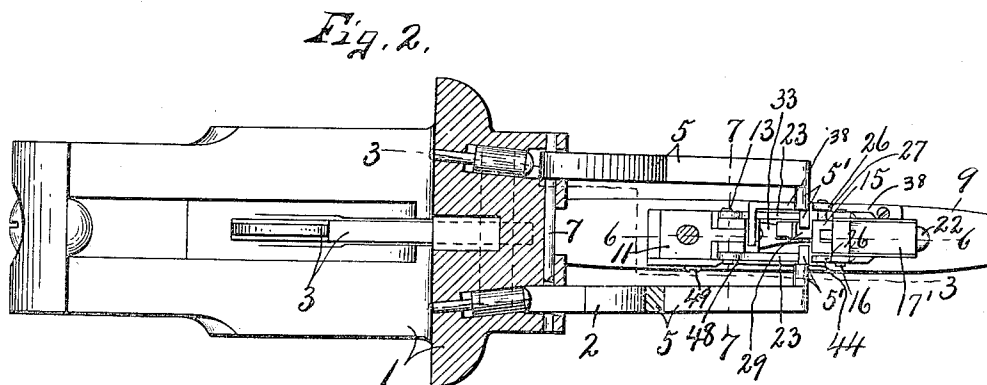
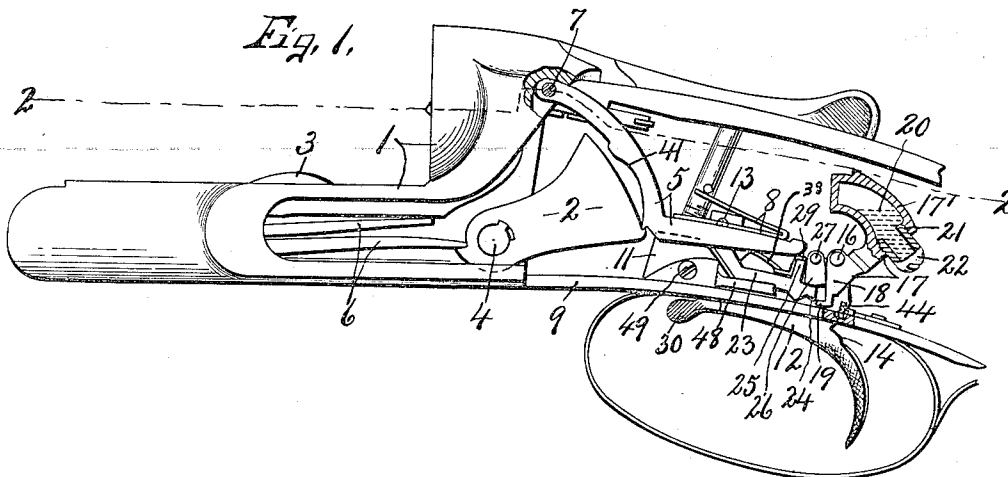
PATENTED JULY 2, 1907.

L. L. CURTIS.

SINGLE TRIGGER MECHANISM FOR DOUBLE BARREL GUNS.

APPLICATION FILED FEB. 26, 1906.

2 SHEETS—SHEET 1.



Witnesses:
H. E. Arthur,
W. B. Chase

Inventor
L. L. Curtis
By
Howard P. Benson
Attorney

No. 858,581.

PATENTED JULY 2, 1907.

L. L. CURTIS.

SINGLE TRIGGER MECHANISM FOR DOUBLE BARREL GUNS.

APPLICATION FILED FEB. 26, 1906.

2 SHEETS—SHEET 2.

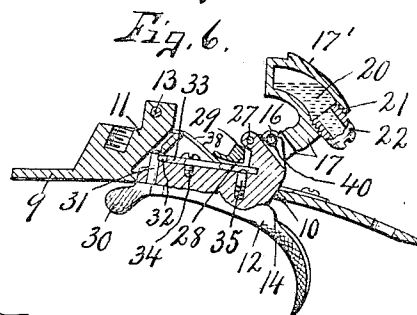
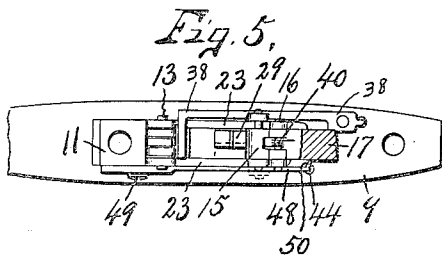
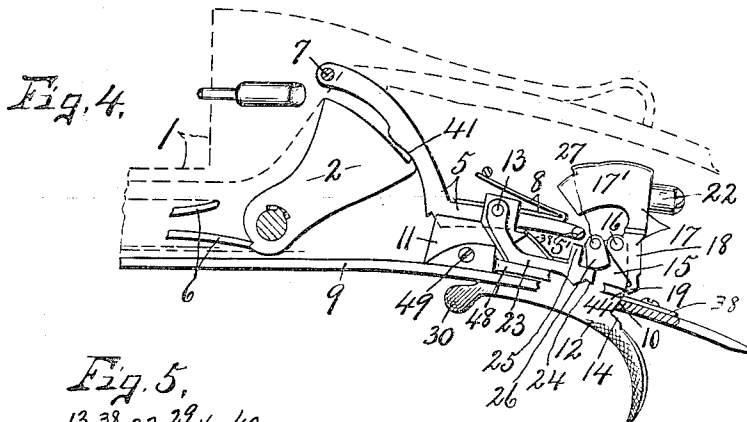
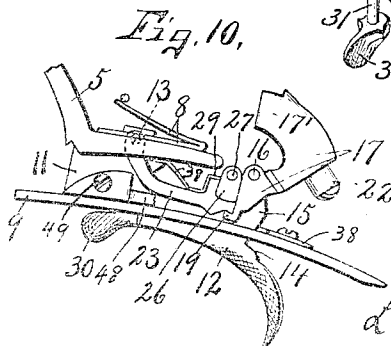
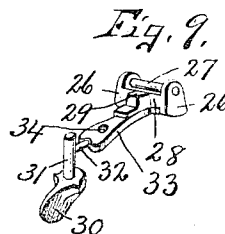
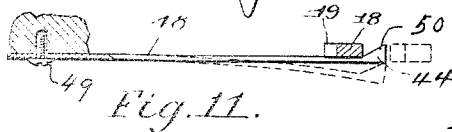
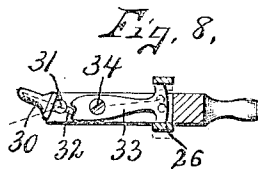
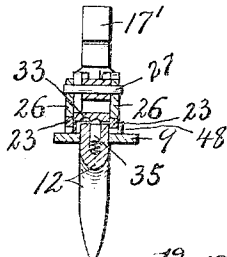


Fig. 7.



26 32 20 858 581

L. L. Curtis
H. C. Chase

Inventor:
L. L. Curtis

By
Howard P. Robinson
Attorney

UNITED STATES PATENT OFFICE.

LESLIE L. CURTIS, OF ONEONTA, NEW YORK.

SINGLE-TRIGGER MECHANISM FOR DOUBLE-BARREL GUNS.

No. 858,581.

Specification of Letters Patent.

Patented July 2, 1907.

Application filed February 26, 1906. Serial No. 302,991.

To whom it may concern:

Be it known that I, LESLIE L. CURTIS, of Oneonta, in the county of Otsego, in the State of New York, have invented new and useful Improvements in Single-Trigger Mechanism for Double-Barrel Guns, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to improvements in single trigger mechanism for double-barrel guns, in which both barrels may be fired successively, one after the other, by the same trigger, and either barrel fired initially, or either barrel may be fired continuously without liability of accidental discharge of the other barrel.

In the use of single-trigger double-barrel guns, several conditions have to be provided for, viz; first, the recoil or kick of the gun after each discharge; second, the rebound or forward action from the shoulder against which the gun is placed, and third, the involuntary pull upon the trigger during the rebound, which in most instances, causes accidental discharge of the second barrel.

I have discovered that different individuals grip the trigger with different degrees of firmness or rigidity; some retaining a firm grip upon the trigger during the discharge and recoil, thereby preventing what is commonly known as "involuntary" pull at the rebound of the gun, and avoiding liability of accidental discharge of the second barrel, while others pull the trigger more lightly, or with a sudden nervous jerk, so that upon the discharge and recoil of the gun, the trigger suddenly recedes from the finger and instantly returns to its normal or operative position and re-engages the finger and accidentally discharges the second barrel upon the rebound unless some means is provided to prevent it.

The essential purpose, therefore, of my invention is not only to obviate any liability of accidental discharge of the second barrel after the other one has been fired, but also to provide means for selecting and enabling either barrel to be fired first when both hammers are cocked, and also to enable both barrels to be fired in quick succession without liability of accidental discharge of either, or one barrel may be fired successively independently of the other barrel by simply breaking the gun to cock the hammer after each fire. These objects are successfully carried out through the medium of a laterally rockable sear-selector, which is rockable vertically, and determines by its lateral adjustment, which barrel shall be initially fired, a manual for shifting the selector laterally, hammer-sears acting when the hammers are cocked to depress or rock the selector, sear-tripping pawls controlling the firing of the second barrel, an oscillatory governor controlling the action of the sear-tripping pawls, but normally thrown out of operative connection therewith by the depression of the selector during the initial discharge of the gun, and a detent for preventing interlocking connection between

the governor and sear-tripping pawls upon the recoil and rebound of the gun, and thereby avoiding accidental firing of the second barrel.

The specific objects are, therefore, first—to enable either sear to be selected and initially fired; second, to cause the cocked sears to depress the selector and hold the governor out of operative connection with the sear-tripping pawls; third, to cause the rebound of the initially fired hammer to release the sear and allow the latter to depress the selector with sufficient force to throw the governor into position to engage and be held out of action by a detent upon the release of the trigger during the recoil, and fourth, to provide the governor with an inert body, as mercury, to retard its recovery until after the recoil is spent and insure its engagement with the detent to prevent accidental firing by the involuntary pull.

Other objects relating to the specific construction and arrangement of the parts involved in the single-trigger mechanism will be brought out in the following description.

In the drawings—Figure 1 is a side elevation of a portion of a double-barrel shot-gun and my improved single-trigger mechanism mounted thereon. Figs. 2 and 3 are sectional views taken respectively on lines 2—2, Fig. 1, and 3—3, Fig. 2. Fig. 4 is a side elevation, similar to Fig. 3, showing the oscillatory governor as temporarily detained in its inoperative position which it assumes upon the rebound of the gun when the trigger is released by the recoil. Fig. 5 is a top plan of a portion of the trigger-plate and sear-tripping mechanism mounted thereon. Figs. 6 and 7 are sectional views taken respectively on lines 6—6, and 7—7, Fig. 2. Fig. 8 is a top plan of the selector and its shifting levers. Fig. 9 is a perspective view of the same. Fig. 10 is a side elevation of the trigger and parts mounted thereon showing the governor and sear-tripping pawls interlocked. Fig. 11 is an enlarged sectional view of the lower end of the sear tripping pawl and its spring detent. Figs. 12 and 13 are respectively an enlarged perspective and a sectional view of the slidable sear selector.

In order to clearly demonstrate the practicability of my invention, I have shown the frame —1— of a double-barrel shot-gun in which is mounted a pair of hammers —2— and a cocking-lever —3—, both of which are keyed to a pivotal pin —4—. The hammers —2— are held in their cocked position by suitable sears —5— against the action of the main springs —6—, said sears being mounted upon a pivotal pin —7— in the frame —1— and are held in locking engagement with their respective hammers by individual springs —8—. A trigger-plate —9— is detachably secured to the underside of the frame —1— and is formed with a trigger opening —10— and a rigid post —11— rising therefrom at the front of the opening —10—. A trigger —12— is pivoted at its front end at —13— to swing in the opening

—10— in which it closely fits and is provided at its rear end with an abutment or stop shoulder 14 adapted to engage the under side of the trigger-plate to limit its upward movement while its downward movement is limited by the engagement of the front end of the trigger with the front end of the opening —10—. The trigger is provided at its rear end with an upwardly projecting post —15—, to which is pivoted at —16— an oscillatory member —17— having an upwardly projecting hollow portion —17'— and a pair of depending arms or pawls —18— rigid therewith which are formed at their lower ends with hooks —19— for a purpose presently described. This oscillatory member is pivoted on a transverse axis to swing forwardly and rearwardly and its hollow upper portion is adapted to receive a more or less inert element, as a body of mercury —20— which is inserted into the hollow portion —17'— through an inlet opening —21—, the latter being afterward closed by a suitable cap or plug —22—, as best seen in Figs. 1 and 6, the purpose of which will be set forth in the description of the operation of the device.

Associated with the sears —5— are companion sear-tripping pawls —23— both of which are pivoted at their front ends upon the same pin —13— to which the trigger 12— is pivoted and extend downwardly and rearwardly from their pivots, and are provided at their rear ends with suitable shoulders —24— for interlocking engagement with the hooks —19— of the pendent-arms —18— of the oscillatory member when the latter is released by the selector after firing, each of the sear-tripping pawls —23— being provided near its rear end with an upwardly projecting shoulder —25— to engage and trip the second sear when interlocked with the governor —17—. The rear ends of these sear-tripping pawls —23— having the hooks —24— are disposed in the paths of movement of their respective pendent-arms —18— and hooks —19— while the upwardly projecting shoulders —25— are spaced apart some distance forwardly from the pendent-arms when interlocked with the shoulders —24— to receive between said shoulders and their companion pendent-arms —18— oscillatory selectors —26— which are rigidly secured to a transversely slidable pin or rock-shaft —27—, the latter being in turn mounted upon the post —15— directly in front of the pivot —16—. These selector fingers —26— are spaced apart a greater distance than the transverse width between the outer faces of the sear-tripping pawls —23— and their companion pendent-arms —18— and are rigidly connected to each other by a transverse bar —28— having a forwardly projecting shoulder —29— of less transverse width than the distance between the sear-tripping pawls —23—, between which it plays or slides transversely. The sears —5— are provided with rearwardly projecting tail-pieces having lateral shoulders 5'— projecting toward each other in a plane directly above the shoulders —25— of the sear-tripping pawls —23— and shoulder —29— of the sear-selecting device, which shoulders lie in substantially the same transverse vertical plane, but are movable independently of each other.

The inner adjacent ends of the sear-offsets —5'— are spaced apart a slightly less distance than the transverse width of the shoulder —29—, and the latter is movable transversely into and out of registration with said offset ends —5'— of the sears —5— for the initial firing of one or

the other of the barrels, according to which sear the shoulder —29— of the selecting device may be in position to trip. For example, if the shoulder —29— is moved to the right under the tail of the right-hand sear, this sear will be tripped first to fire the right-hand barrel when both hammers are cocked, while on the other hand, if it is moved to the left, the left-hand sear will be first tripped to fire the left-hand barrel.

Any suitable means may be employed for shifting the selecting device, such means preferably consisting of a finger-lever —30— rigidly secured to a pin —31— which is journaled in the forward end of the trigger —12— and its upper end is provided with a rearwardly projecting pin 32— which enters the bifurcated end of a lever —33—. This lever is pivoted at —34— upon the trigger and its rear end is fitted between and engages the inner faces of the selecting fingers —26— so that when the finger-lever —30— is adjusted, either to the right or to the left, the selector, including the shoulder —29— and pendent fingers —26— are similarly shifted to the right or to the left, according to the position of the finger-lever —30—.

A spring actuated detent —35— is loosely fitted in a suitable socket in the trigger —12— and its upper end is usually pointed, and adapted to enter one or the other of the two recesses in the under side of the rear end of the lever —33— to hold said lever and its actuating parts, as well as the actuated parts —26— and —29— in their adjusted positions. It is now apparent that the lever —33— engages respectively the pin —32— and sear-selector at opposite sides of its fulcrum —34— so that by rocking the finger-piece —30— in one direction, the end of the lever —33— engaging the sear-selector —29— is rocked in the same direction, and the position of the finger-lever —30— indicates at once which barrel will be initially fired after each break of the gun.

The oscillatory member —17—, which may be hereafter termed, the "governor," controls the operation of the sear-tripping pawls —23—, which in turn, controls the firing of the second barrel after the discharge of the first barrel, for as previously stated, I provide a pair of these sear-tripping pawls, one for each sear, and also provide the governor —17— with a pair of pendent hooks —19—, which are adapted to interlock with one of the other shoulders —24— of the sear-tripping pawls —23— when the governor is in its firing position, as seen in Fig. 10. This governor —17— is yieldingly held in its normal locking position with the sear-tripping pawls by a comparatively light coil-spring —40— wound around its fulcrum pin and having one end bearing upon the post —15— on the trigger and its other end engaged with the front face of the governor, as best seen in Fig. 6, while the body of mercury, or equivalent inert body —20— in the upper portion of the governor is normally at the rear of a vertical line drawn through the fulcrum of said governor to afford a certain degree of inertia which has to be overcome before the governor can be thrown from its normal position, and also to aid the spring —40— in holding the governor interlocked with the sear-tripping pawls —23—.

I have previously called attention to three conditions which have to be provided for in this class of guns, viz: first, the recoil or kick of the gun; second, the rebound or forward movement, and third, the involuntary pull of the trigger during the rebound, which in most in-

one of the sears, according to the position of the selector either to the right or to the left, engages and depresses such selector, thereby rocking the pendent-fingers —26— rearwardly to engage the arms —18— and throw the hooks —19— out of interlocking connection with their respective sear-tripping pawls —23— so that when the trigger is initially pulled to fire one of the barrels corresponding to the sear with which the selector is registered, such sear will be tripped to discharge the corresponding barrel, while the governor —17— and its hooks —19— will simply be elevated irrespective of their sear-tripping pawls —23—, which latter remain in their normal down-positions. During this initial firing, the tail of the sear is elevated by the trigger and held by its hammer some distance above the horizontal plane of the tail of the other sear, and immediately upon the rebound of the hammer the recess —41— allows the spring —8— to instantly depress the tail of the fired sear against the selector —29— with sufficient force to throw the governor —17— forwardly, whereupon the inert body —20—, which upon the initial forward movement of the governor, recedes to the rear and soon recovers itself and rushes forward into the front end of the receptacle to retard the return of the governor when it reaches the limit of its forward movement so that the governor will not return to its normal position until after the recoil of the gun is spent. Now, if a firm grip is maintained upon the trigger during the recoil and rebound of the gun, the governor —17— is held up with its hooks —19— above the shoulders —24— of the sear-tripping pawls, and consequently, the shoulders —19— will simply abut against the rear end faces of said sear-tripping pawls and not interlock therewith until the operator intentionally releases the grip upon the trigger and allows the latter to return to its normal position, in which position the governor —17— will be rocked to interlock the shoulders —19— with the shoulders —24— of the sear-tripping pawls. If, however, the trigger is pulled carelessly, or with a loose grip, allowing it to recede from the finger and return to its normal position during the recoil and rebound, it might, unless prevented, cause an involuntary pull upon the trigger and consequent accidental discharge of the second barrel, but to prevent such a condition, I provide the shoulder —44— to engage the shoulder —19— upon the return of the governor —17—, such shoulder —44— being located some distance at the rear of the shoulder —24— of the adjacent sear-tripping pawl —23—, thus preventing the shoulders —19— from interlocking with their sear-tripping pawls. When the governor —17— is thus held from returning to its normal or interlocking position with the sear-tripping pawls —23—, before the second barrel can be fired, the involuntary pull upon the trigger elevates the governor —17— out of engagement with the shoulder —44—, allowing the governor —17— to be returned by its actuating spring to bring the shoulders —19— into engagement with the ends of the sear-tripping pawls —23— ready for firing the second barrel by the intentional release of the trigger. It is now clear that when a firm grip is maintained upon the trigger during the firing of one barrel, it is necessary for the operator to release and pull the trigger a second time before firing the second barrel, while if the trigger is allowed to recede from the finger upon the recoil of the gun after the initial firing, the rebound causes an

involuntary pull upon the trigger to elevate the governor to discharge the hook —19— from the shoulder —44—, whereupon the intentional release of the trigger allow the hooks —19— to interlock with the shoulders —24—. As the initial sear is tripped, its tail-end is forced by the trigger upwardly where it is held by the hammer so that when the trigger is pulled for tripping the second sear the load of the initial fired sear and the tension of its spring is entirely removed, and it, therefore follows that the pull upon the trigger is always uniform for firing both barrels.

What I claim:

1. In a single trigger mechanism for multi-barrel guns, a governing mechanism including a receptacle movable independently of the trigger and an inert body loose in the receptacle for retarding the action of said receptacle. 80
2. In a single trigger mechanism for multi-barrel guns, a governing mechanism including an oscillatory receptacle movable independently of the trigger, and an inert body loose in the receptacle for retarding the action of said receptacle. 85
3. In a single trigger sear-tripping mechanism for double-barrel guns, a laterally slidable sear-tripping selector mounted on the trigger, manually operated means for shifting said selector from one sear to the other to determine which barrel shall be fired first, sear-tripping pawls for controlling the firing of the second barrel, means on the trigger for operating said pawls, and additional means actuated by the selector for forcing the last named means out of operative connection with the pawls during the initial discharge of the gun and allowing said first named means to interlock with the pawls after such initial discharge. 90 95
4. In a single trigger sear-tripping mechanism for double-barrel guns, a sear-tripping selector mounted on the trigger and adjustable alternately from one sear to the other to determine which barrel shall be fired first, said selector having an independent vertical rocking movement, sear-tripping pawls, one for each sear, additional pawls each adapted to automatically interlock with and operate one of the sear-tripping pawls after the initial discharge, said selector being normally depressed by one of the sears when in its cocked position, and operating to disconnect the additional pawls from their sear-tripping pawls during the initial discharge of the gun. 100 105 110
5. In combination with the hammers, main springs, sears and sear-springs of a double-barrel gun, a pivoted trigger, a vertically rockable sear-selector adjustable laterally into and out of registration with each of the sears to determine which barrel shall be fired first, the tail of the sear with which the selector is registered resting upon and normally depressing said selector when the hammers are cocked, sear-tripping pawls, one of which is adapted to engage and operate the other sear for discharging the second barrel, means actuated by the depression of the selector for preventing the operation of the sear-tripping pawls when the trigger is pulled for the initial firing, and trigger-controlled means automatically interlocking with one of the sear-tripping pawls after such initial discharge to discharge the second barrel. 115 120 125
6. In a single-trigger sear-tripping mechanism for double-barrel guns, a selector adjustable into and out of registration with each of the sears to determine which barrel shall be fired first, sear-tripping pawls controlling the firing of the second barrel, a governor controlled by the selector and controlling the operation of the sear-tripping pawls. 130
7. In a single-trigger sear-tripping mechanism for double-barrel guns, comprising a sear-tripping pawl, an oscillatory governor adapted to interlock with and operate said pawl when the trigger is pulled, and means actuated by the cocking of one of the sears for throwing the governor out of operative connection with the sear-tripping pawl. 135
8. A single-trigger sear-tripping mechanism for double-barrel guns, comprising a vertically rockable sear-tripping member on the trigger and adjustable laterally to determine which sear shall be first tripped upon the initial pull of the trigger, one of the cocked levers bearing upon and

tances, is the direct cause of accidental discharge of the second barrel immediately following the firing of the other one. My invention is more specifically directed to preventing such accidental discharge, and while the governor —17—, including the inert body —20—, is essentially instrumental in carrying out this object through its control of the sear-tripping pawls —23—, I also employ another precautionary means for positively throwing the governor out of operative connection with said pawls immediately upon the discharge of one of the barrels. This is accomplished by the rebound of the fired hammer —2— and its co-acting sear —5— which has its hammer-engaging-face cut away or recessed at —41— sufficient so that when the hammer —2— rebounds to the position shown by dotted lines in Fig. 3, it will allow the spring —8— to suddenly depress the tail of the sear against the shoulder —29— with sufficient force to cause the pendent fingers —26— to engage the arms —18— and throw the upper end of the governor forwardly to the position shown in full lines in said Fig. 3 against the action of its spring —40—, thereby throwing both hooks —19— out of position for interlocking engagement with their respective sear-tripping pawls —23—. This action of the tail of the sear upon the sear-selecting device —29— and its pendent arms —26— to throw the governor forward is, of course, instantaneous and occurs between the recoil and rebound of the gun, and if a firm grip is maintained upon the trigger to hold it up, as seen in Fig. 3, it is evident that when the governor —17— returns by its spring —40— towards its normal position its hook-shaped extremities —19— will simply abut against the end faces of their respective sear-tripping pawls, as shown by dotted lines in said figure, and before the second barrel can be fired the operator will have to release his grip upon the trigger and allow it to return to its normal position before the hook-shaped extremities —19— can interlock with their respective shoulders —24— of the sear-tripping pawls, which are only employed to trip the second sear for firing the second barrel after the discharge of the other barrel. When the trigger is thus firmly maintained in its fired position, as seen in Fig. 3, during the discharge and recoil of the gun, there is, of course, no involuntary pull, but when the trigger is pulled with less firmness or strength, and the recoil of the gun causes the trigger to recede from the finger, said trigger will, of course, return to its normal position by the action of its spring —38—, and unless some provision is made for preventing the governor —17— from interlocking with the sear-tripping pawls, it is evident that about the same instant that such interlocking connection was made, the rebound of the gun from the shoulder would force the trigger forward into engagement with the finger and cause the accidental discharge of the second barrel immediately following the discharge of the other barrel. In order to prevent this connection between the governor and sear-tripping pawls, and consequent involuntary pull and discharge of the second barrel, I provide a shoulder or abutment —44— which is mounted upon the trigger-plate and projects upwardly therefrom into the path of movement of one of the pendent hooks —19—, preferably on the left pendent arm —18— of the governor —17—, which in case the trigger recedes from the finger upon the recoil of the gun, allowing the trigger to return to its normal position, engages said abutment or shoulder —44—

and prevents both hooks —19— from interlocking with their respective sear-tripping pawls —23—.

It is now evident that as long as the trigger remains in its down-position after being released from the finger on the recoil, the abutment —44— will serve to hold the governor out of operative connection with the sear-tripping pawls, until the involuntary pull upon the trigger elevates it, whereupon the spring —40— aided by the inert body —20—, will rock the governor into position to permit the hooks 19— to engage the end faces of the pawls —23—, and the intentional releasing of the trigger allows it to return to its normal position, thereby bringing the governor into position to engage its hooks —19— with the shoulders —24— of the sear-tripping pawl ready to fire the second barrel.

The principal purpose of the inert body —20—, which is preferably some non-freezing fluent, as mercury, is to retard in a measure, the too sudden return of the governor to its normal position after having been forced forwardly by the discharge of the gun, for it is evident that by suddenly throwing the governor forwardly the inertia of the mercury will cause it to recede to the rear end of the governor, and by the time the governor has reached the limit of its forward movement, the inertia of the mercury will have been overcome and it will rush forwardly into the front end at about the time it begins to return, thereby retarding by its own inertia, such return until after the limit of the recoil of the gun, which causes the trigger to recede from the finger and return to its normal position, and allows the left-hand shoulder —19— to fall in behind, or against the abutment —44— to prevent accidental discharge by involuntary pull upon the trigger during the rebound of the gun.

It is now obvious that the essential purpose of the pendent fingers —26— is to throw the governor out of operative connection with the sear-tripping pawls normally and upon the recoil of the gun, but they also perform another function of positively depressing the sear-tripping pawls with the return of the trigger to its normal position, that is, one of them, at least, is always interposed between one of the pendent arms —18— and the shoulder 25— of its corresponding sear-tripping pawl to depress such pawl with the trigger while the other pawl is depressed by the end of the lever —33— which lies between the fingers —26—. The shoulder or abutment —44— is preferably formed upon the end of a lengthwise spring —48— which is secured by a screw —49— to the post —11—. This spring —48—, and also the trigger-retracting spring —38— are located at opposite sides of and in close proximity to the sear-tripping pawls —23—, and serve to hold said pawls against lateral displacement as the trigger is raised and lowered, both of said springs having their rear ends provided with depending shoulders to enter suitable apertures in the trigger-plate to hold them against undue lateral movement, although the rear end of the spring —48— having the shoulder —44— has a slight lateral movement, and is provided with an inner cam face —50—, which is adapted to be engaged by the adjacent pendent-arm —18— or shoulder —19— to permit the governor —17— to be rocked forwardly when the trigger is normal.

In the operation of my invention, when both hammers are cocked, the tail-ends 5'— of the sears —5— are disposed in substantially the same horizontal plane, and

rocking the sear-tripping member in one direction, and means controlled by the vertical rocking movement of the sear-tripping member for controlling the discharge of the second barrel after the discharge of the first barrel.

9. In a single-trigger sear-tripping mechanism for double-barrel guns, a sear-tripping pawl, an oscillatory governor adapted to automatically interlock with the pawl, means actuated by the cocking of the sear to disconnect the governor from the pawl, and additional means actuated by the pull of the trigger for tripping one of the sears.

10. A single-trigger sear-tripping mechanism for double-barrel guns, means actuated by the initial pull of the trigger to actuate one of the sears, a sear-tripping pawl for actuating the other sear, means controlled by the first named sear for controlling the action of the sear-tripping pawl.

11. A single-trigger sear-tripping mechanism for double-barrel guns, comprising a vertically rockable selector mounted upon and actuated by the initial pull of the trigger to trip one of the sears, said selector being rocked in one direction by the pressure of the sear thereon, a sear-tripping pawl for tripping the other sear, and means controlled by the vertical rocking movement of the selector for controlling the action of the sear-tripping pawl.

12. A single-trigger sear-tripping mechanism for double-barrel guns, comprising a vertically rockable selector mounted upon and actuated by the initial pull of the trigger to trip one of the sears, said selector being rocked in one direction by the pressure of the sear thereon, a pawl for tripping the other sear, but movable independently of the trigger, and means controlled by the vertical rocking movement of the selector for making and breaking connection between the trigger and said pawl.

13. In a single-trigger sear-tripping mechanism for multi-barrel guns, a vertically rockable selector adjustable laterally to engage and trip one of the sears upon the initial pull of the trigger, a pawl separate from the trigger for tripping the other sear, and means controlled by the vertical rocking movement of the selector for making and breaking connection between the trigger and pawl.

14. A single-trigger sear-tripping mechanism, for multi-barrel guns comprising a vertically rockable selector mounted upon the trigger and adjustable laterally to trip one or the other of the sears, a pawl separate from the trigger for tripping the other sear, an oscillatory governor mounted on the trigger and movable into and out of interlocking connection with the pawl, said interlocking connection being controlled by the vertical rocking movement of the selector.

15. In a single-trigger sear-tripping mechanism for multi-barrel guns, a sear tripping pawl separate from the trigger, an oscillatory governor mounted on the trigger and spring actuated in one direction to interlock with said pawl, and means actuated by the pressure of one of the sears to disengage the governor from the pawl.

16. A single-trigger sear-tripping mechanism for multi-barrel guns comprising a sear-tripping pawl separate from the trigger, an oscillatory governor mounted on the trigger and spring actuated in one direction to interlock with the pawl, a vertically rockable selector mounted upon the trigger and adjustable laterally to engage one or the other of the sears separately, said selector being rocked upon its axis in one direction by the pressure of the sear which engages it and having means thereon to engage and throw the governor out of interlocking connection with the pawl, said selector being actuated by the initial pull of the trig-

ger to trip the sear which engages it and the governor acting upon the selector to return it to its normal position, and to interlock with the pawl.

17. In a single-trigger sear-tripping mechanism for multi-barrel guns, a sear-tripping pawl separate from the trigger, an oscillatory governor mounted on the trigger and spring actuated in one direction to interlock with the pawl, means actuated by the initial pull of the trigger to engage and trip one of the sears, the pressure of said sear actuating said means to disengage the governor from the pawl after said sear is fired, whereupon the governor retracts upon said means to retract the same and interlock with its pawl.

18. In combination with the hammers, main-springs, sears and sear-springs of a multi-barrel gun, a trigger, and means actuated by the initial pull of the trigger to trip one of the sears, means on the sear to permit it to be acted upon by its spring during the rebound of the hammer, a sear-tripping pawl for actuating the other sear, an oscillatory governor mounted on the trigger and spring actuated in one direction to interlock with the pawl, and means actuated by the movement of the fired sear during the rebound of its hammer to prevent the governor from interlocking connection with the pawl, a detent for preventing the return of the governor to its interlocking position with the pawl, and an inert body loose in the governor to retard its return toward the detent.

19. In a single-trigger sear-tripping mechanism for breech-loading guns, a sear-tripping pawl, a movable member spring actuated in one direction to interlock with said pawl, said member carrying an inert body free to move thereon, in combination with the main hammer, and means controlled by its rebound after firing to throw said member in the opposite direction.

20. In a single-trigger sear-tripping mechanism for multi-barrel guns, a trigger, a sear-tripping pawl separate from the trigger, a governor mounted upon the trigger and spring-actuated in one direction to interlock with the pawl, said governor carrying a more or less inert body loose therein, in combination with a sear, and means actuated thereby for throwing the governor in the opposite direction.

21. In combination with the hammers, sears and trigger of a multi-barrel gun, means to trip one of the sears, and additional means actuated by the rebound of the fired hammer for preventing the tripping of the other sear by the involuntary pull upon the trigger.

22. In combination with the hammer, sears and trigger of a multi-barrel gun, means to trip one of the sears, and additional means actuated by the tripped sear to prevent tripping of the second sear by the involuntary pull upon the trigger during the rebound of the gun.

23. In a single trigger mechanism for double barrel guns, separate firing mechanisms, one for each barrel, and means for governing the operation of said firing mechanisms, said means including a movable receptacle containing a body of mercury, the receptacle being larger than the body of mercury to permit the movement of the latter therein for the purpose of governing the movement of the receptacle and preventing the firing of the second barrel during the recoil incidental to the discharge of the first barrel.

In witness whereof I have hereunto set my hand this fifteenth day of February 1906.

LESLIE L. CURTIS.

Witnesses:

LAURA L. DISBROW,
ALVA SEYBOLT.