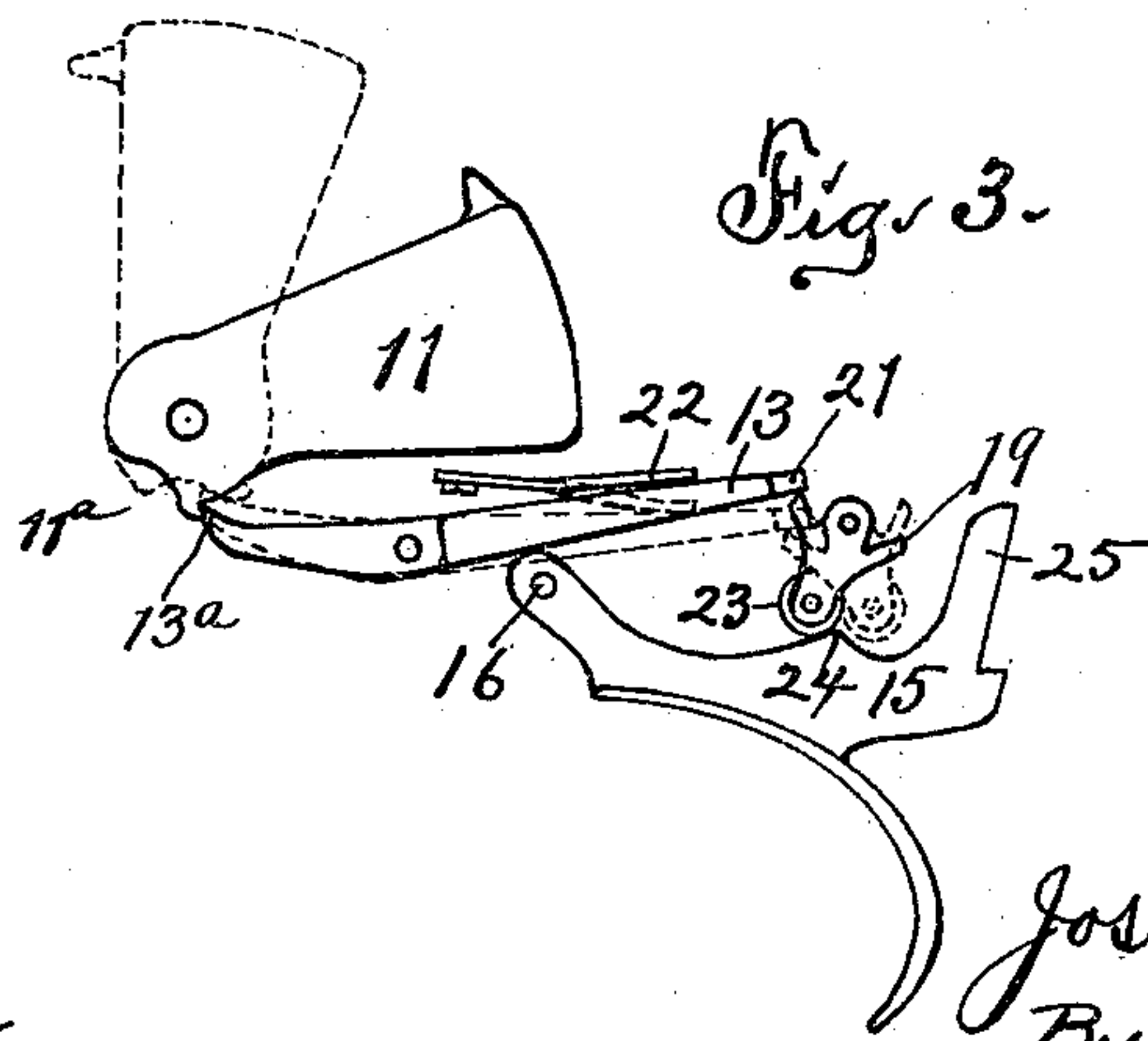
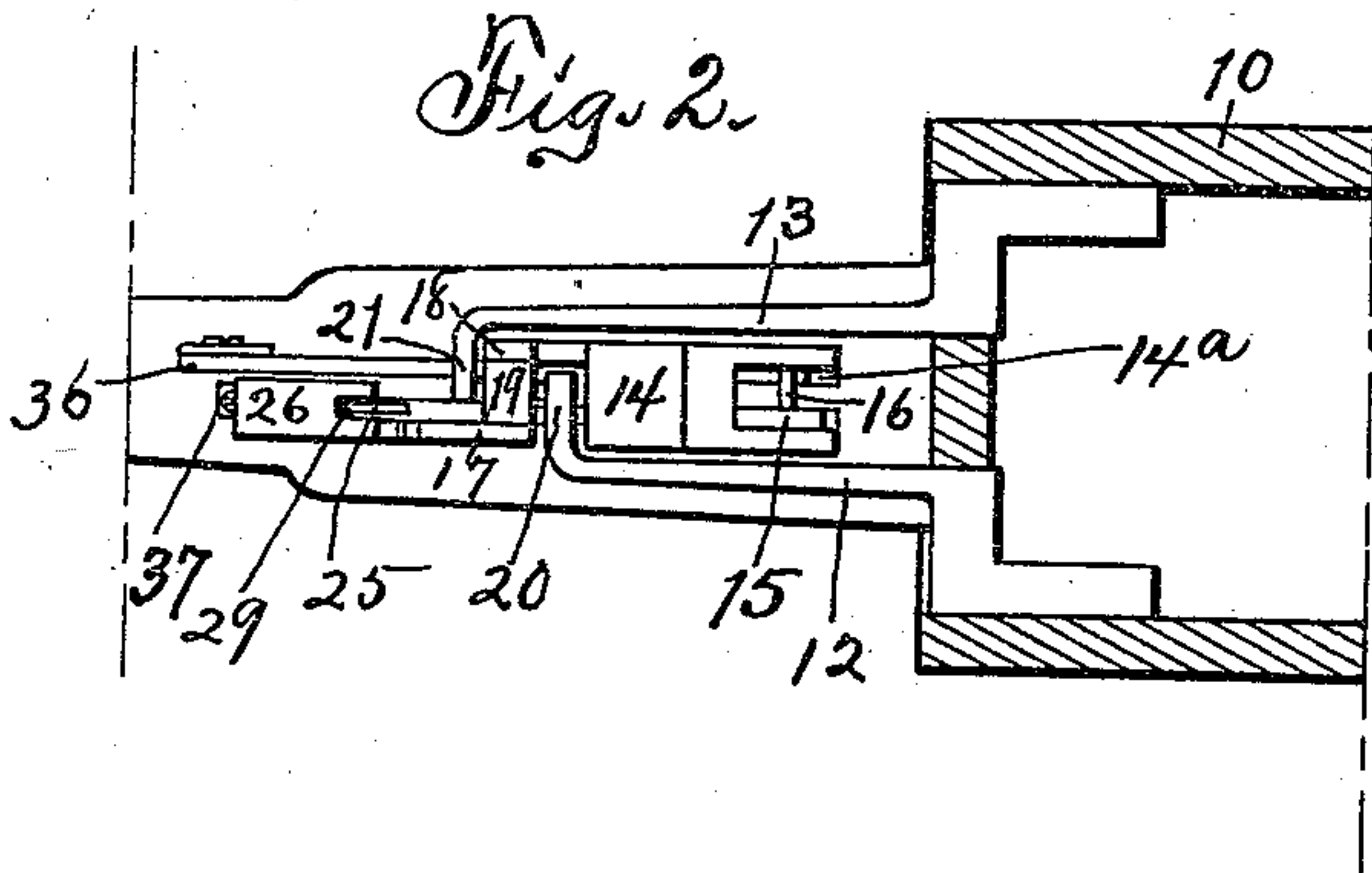
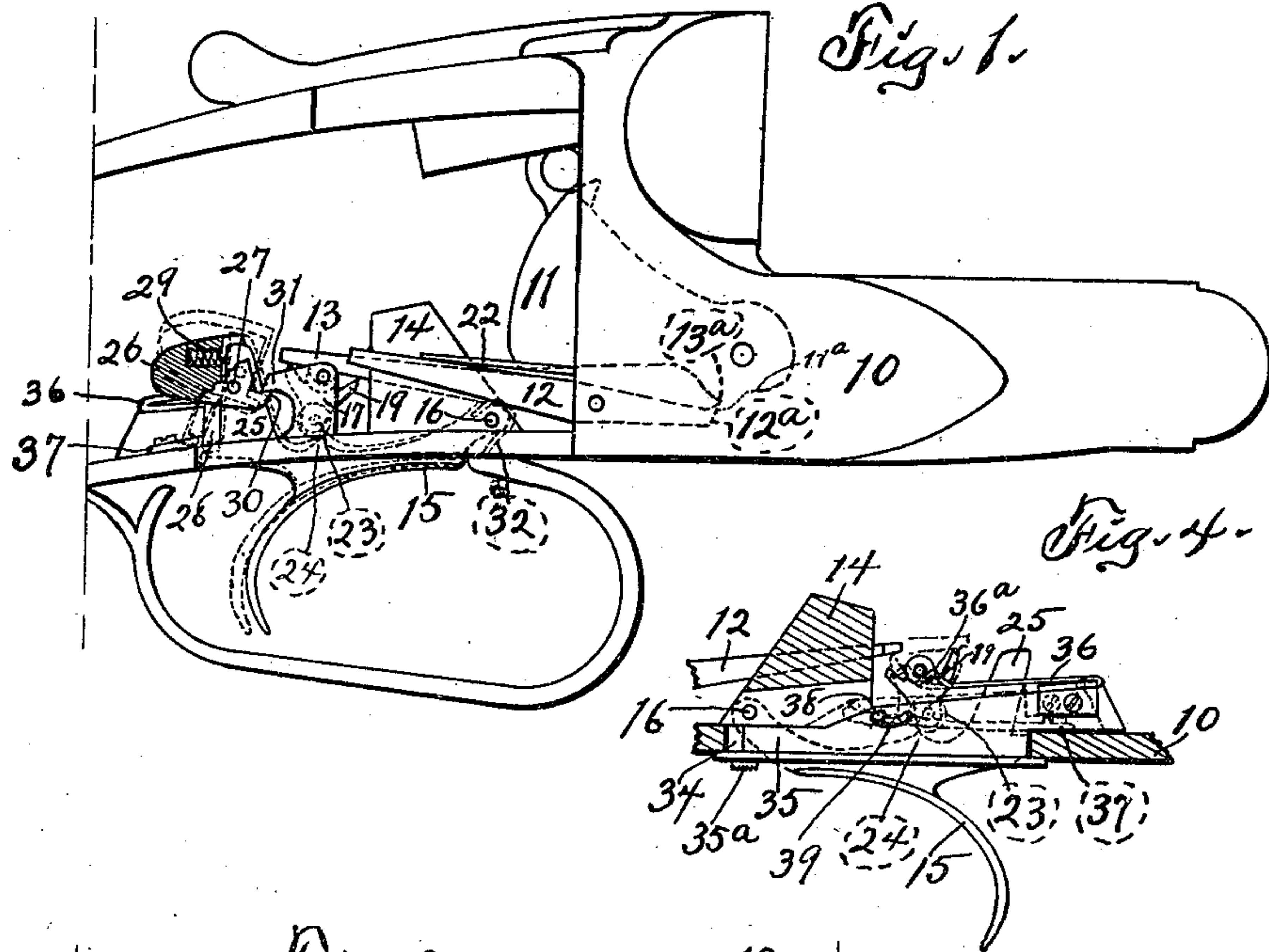


J. KAUTZKY.
 AUTOMATIC SINGLE TRIGGER MECHANISM FOR DOUBLE BARREL GUNS.
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990,562.

Patented Apr. 25, 1911.



Attest:
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 By *[Signature]* Att'y

UNITED STATES PATENT OFFICE.

JOSEPH KAUTZKY, OF FORT DODGE, IOWA.

AUTOMATIC SINGLE-TRIGGER MECHANISM FOR DOUBLE-BARREL GUNS.

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Specification of Letters Patent.

Patented Apr. 25, 1911.

Application filed September 7, 1910. Serial No. 580,861.

To all whom it may concern:

Be it known that I, JOSEPH KAUTZKY, citizen of the United States of America, and resident of Fort Dodge, Webster county, Iowa, have invented a new and useful Automatic Single-Trigger Mechanism for Double-Barrel Guns, of which the following is a specification.

The object of this invention is to provide an improved automatic mechanism for operating the single trigger of a double-barrel gun so that when the trigger is pulled to discharge either barrel the automatic action of the mechanism will position the parts relative to the trigger for the discharge of the other barrel.

A further object of this invention is to provide improved selective mechanism whereby either barrel of a double-barrel gun may be fired first by a single trigger.

A further object of this invention is to provide improved means for preventing the immediate discharge of the second barrel after the discharge of the first barrel of a double-barrel gun, independently of the recoil.

My invention consists in the construction, arrangement and combination of elements hereinafter set forth, pointed out in my claims and illustrated by the accompanying drawing, in which—

Figure 1 is a side elevation of a gun lock embodying my invention, dotted lines showing the trigger and connected parts in altered positions. Fig. 2 is a horizontal section of portions of the same. Fig. 3 is a side elevation of some of the operative mechanism removed from the supporting frame. Fig. 4 is a longitudinal vertical section of portions of the mechanism, illustrating means for discharging the selected barrel first.

In the construction of the device as shown the numeral 10 designates the frame for a gun lock and said frame is adapted for hanging two barrels (not shown) to its front end portion. Hammers 11 are pivoted to the frame 10 in a common manner and sears 12, 13 are pivoted below said hammers. The forward ends of the sears 12, 13 terminate in upward projections 12^a, 13^a adapted to engage in notches in the lower portions of the hammers 11 to retain said hammers in cocked positions. A standard 14 is integral with and rises from the lower plate of the frame 10 at the rear of the hammers 11 and said

standard is formed with a recess 14^a in its forward lower portion in which recess the forward end portion of a trigger 15 is pivoted by means of a pin 16. Standards 17, 18 are formed on and rise from the lower plate of the frame 10 at the rear of the standard 14 and a tumbler 19 is pivoted between said standards and in a pendent position. The sears 12, 13 are provided at their rear ends with right-angled inwardly projecting arms 20, 21 (Fig. 2) adapted to be engaged alternately by the tumbler 19 to raise said sears and release the hammers 11 for the discharge of the gun. The sears 12, 13 are normally held in depressed positions so as to engage the notches of the hammers 11 by means of springs 22. A roller 23 is journaled to the free lower end of the tumbler 19 and said roller is adapted to be engaged by and roll on a cam 24 on the top of the trigger 15, by means of which contact the tumbler is raised into engagement with the arms 20, 21 of the sears when the trigger is pulled. The trigger 15 is formed with an upwardly projecting lug 25 on its rear end portion and a block 26 is bifurcated at its forward portion and hinged by means of a pin 27 to said lug. The block 26 is formed with a downwardly projecting integral leg 28 which normally rests against the rear face of the lug 25 on the trigger, being held in such position by an expansive coil spring 29 in the upper portion of the block and bearing against the upper portion of said lug, above the pin 27. The block 26 is also formed with a forwardly projecting hook 30 on its forward lower portion, and said hook engages beneath a rearwardly projecting hook 31 on the upper portion of the standard 17.

In the operation of the mechanism thus far described, the parts being in the positions shown by solid lines in Fig. 1, a pull on the trigger 15 will cause the rear face of the cam 24 to engage the roller 23 and oscillate the tumbler 19 and cause the rear shoulder thereof to engage and press upwardly against the sear 13. Such pressure will disengage the lip 13^a of the sear from its notch in the left hammer 11, causing said hammer to move rotatively under its spring pressure and discharge the left barrel of the gun. In its movement to discharging position the left hammer brings a recess 11^a therein into place over the lip 13^a of the sear 13, thus releasing the forward end of said sear and permitting the rear end thereof

to descend and move the tumbler 19 reversely into position for discharging the second barrel. The same operation is followed, in reverse manner, when the order of firing is reversed. The pull of the trigger will cause the lug 25 thereon to rise, carrying with it the block 26. The hook 30 on the block 26 is held down by the hook 31 on the standard 17, thus causing a greater elevation of the rear portion of the block, which is free to oscillate on the pin 27, against the comparatively slight resistance of the spring 29. Such movement of the block 26 will cause the leg 28 thereon to move away from the rear face of the lug 25, and when pressure on the trigger is suddenly released by the recoil the rear end of said trigger will be forced down by the pressure of the sear spring 22 pressing down the rear end 21 of the sear 13. This pressure tends to move the rear shoulder of the tumbler 19 downwardly and force the roller 23 forward over the cam 24 of the trigger, but the trigger is forced downward with such swiftness that the block 26 is not permitted to return to its normal position and the lower end of the leg 28 engages the upper surface of the trigger plate immediately at the rear of the trigger slot. This engagement, however, is only temporary, as the rebound of the gun from the shoulder of the operator will cause the trigger to engage his finger and be raised, which will release the leg 28 from its engagement on the trigger plate. Then when the trigger is released, at the will of the operator, the leg 28 will return to its normal position under the pressure of the spring 29 and descend with the trigger through the trigger slot. The construction and arrangement above described is for the purpose of holding the trigger up momentarily after the discharge so that the roller 23 can not pass over the cam 24 and allow the tumbler 19 to engage the sear 12 until the trigger is intentionally released, thus preventing an accidental discharge of the second barrel as a result of the discharge of the first. During the releasing movement of the trigger 15 the roller 23 is permitted to ride over the cam 24 to a position for discharging the right barrel of the gun for the second shot. When the trigger is again pulled the front face of the cam 24 will engage the roller 23 and raise the forward shoulder of the tumbler 19 against the arm 20 of the sear 12 and depress the forward portion of said sear to a disengagement thereof from the notch of the right hammer 11 and the right barrel of the gun will be discharged for the second shot. It will be observed that the block 26 is brought into its blocking position by the movement of the trigger pull before the recoil occurs, and entirely independent of such recoil. When both hammers are in discharged position the

lips of the sears are in recesses of the hammers, hence the rear ends of the sears rest loosely and in balancing relations on the shoulders of the tumbler 19. When both hammers are cocked, by opening the gun, the front ends or lips of the sears are again engaged in the notches of the hammers 11, the rear ends of the sears are elevated, and the selective mechanism hereinafter described adjusts the tumbler selectively.

I have also provided a selective attachment for determining which barrel (right or left) shall be first discharged. This attachment consists of a slot 34 in the trigger plate in which is mounted a slide 35 carrying at its rear end portion a spring 36, which spring extends forwardly therefrom (see Fig. 4). The slide 35 is provided with a thumb-piece 35^a by means of which the slide may be manually reciprocated in the slot 34. The spring 36 is provided with an inverted V-shaped forward end portion 36^a which engages beneath a flat shoulder on one side of the tumbler 19 and near its top, and presses upwardly thereon. When the slide 35 is in its rearmost position as shown such pressure of the spring 36 holds the tumbler rearwardly with the roller 23 on the rear side of the cam 24, in a position to fire the left barrel first. When it is desired to reverse the order of firing the slide 35 is pushed forwardly, carrying the spring 36 with it. The front leg of the inverted V then leaves its seat beneath the shoulder of the tumbler 19 and the rear leg of the inverted V engages beneath said shoulder, forcing the lower portion of the tumbler forwardly and causing the roller 23 to ride over to the front side of the cam 24, in a position to fire the right barrel first. After the first barrel is fired the pressure of the sear, oscillating the tumbler for the second shot, overcomes the pressure of the spring 36.

A spring 37 (dotted lines Fig. 4) is secured at its rear end to the trigger plate and carries on its forward end portion a laterally projecting pin 38 which projects through a curved slot 39 in the slide 35 and tends to hold said slide in any position in which it may be placed by manual operation.

I claim as my invention—

1. In a gun lock, a frame, a trigger standard projecting upwardly within said frame, a trigger pivoted to and extending rearwardly from said standard, auxiliary standards at the rear of said trigger standard, a tumbler pivoted between said standards, said trigger formed with an upwardly projecting lug on its rear end, a block pivoted to said lug, a downwardly projecting leg on said block, and means on the frame for throwing said leg rearwardly when the trigger is pulled to prevent both barrels being discharged when the trigger is pulled once.

2. In a gun lock, a frame, a trigger stand-

ard projecting upwardly within said frame, a trigger pivoted to and extending rearwardly from said standard, a tumbler pivoted to said frame above said trigger, said trigger formed with an upward projection on its rear end portion, a block pivoted to said projection at the rear thereof, a leg projecting downwardly from said block, means for holding said leg forwardly against the trigger, and means for throwing said leg away from the trigger when said trigger is pulled, whereby the trigger is momentarily retained in elevated position to prevent immediate discharge of the second barrel.

3. In a gun lock, a frame, a trigger standard projecting upwardly within said frame, a trigger pivoted to and projecting rearwardly from said standard, auxiliary standards at the rear of said trigger standard, a tumbler pivoted between said auxiliary standards, one of said auxiliary standards formed with a rearwardly projecting hook, said trigger formed with an upwardly extending lug on its rear end, a bifurcated block pivoted to said lug, a leg formed on and extending downwardly from said block, a spring acting on said block to hold said leg against the rear face of said lug, and a hook on the front of said block adapted to engage the hook on the standard and move said leg away from the lug when the trigger is pulled, said leg adapted to engage a portion of the frame and hold the trigger up momentarily after the same has been released.

4. In a gun lock, a frame, a trigger standard projecting upwardly within said frame, a trigger pivoted to and extending rearwardly from said standard, auxiliary standards at the rear of the trigger standard, a tumbler pivotally suspended between said standards, spring-pressed sears pivoted in front of and extending above said tumbler, lateral arms on said sears adapted to be engaged by the top of said tumbler, a cam on the upper portion of the trigger, a roller on the lower end of the tumbler adapted to ride over said cam, a lug formed on and rising from the rear portion of the trigger, a bifurcated block pivoted to said lug, a downwardly projecting leg on said block, a spring in said block acting against the top of the lug to hold said leg forwardly, one of said auxiliary standards formed with a rearwardly projecting hook, a hook on the front of the block adapted to engage the hook on the standard and move said leg rearwardly against the spring when the trigger is pulled, said leg adapted to engage a portion of the frame and hold the trigger in elevated position so that the roller may not ride over the cam and cause an immediate discharge of the second barrel.

Signed by me at Des Moines, Iowa, this 30th day of August, 1910.

JOSEPH KAUTZKY.

Witnesses:

S. C. SWEET,
EARL M. SINCLAIR.