A. FYRBERG.

FIREARM.

APPLICATION FILED FEB. 1, 1909.

945,320.

Patented Jan. 4, 1910.

Fig. 1.

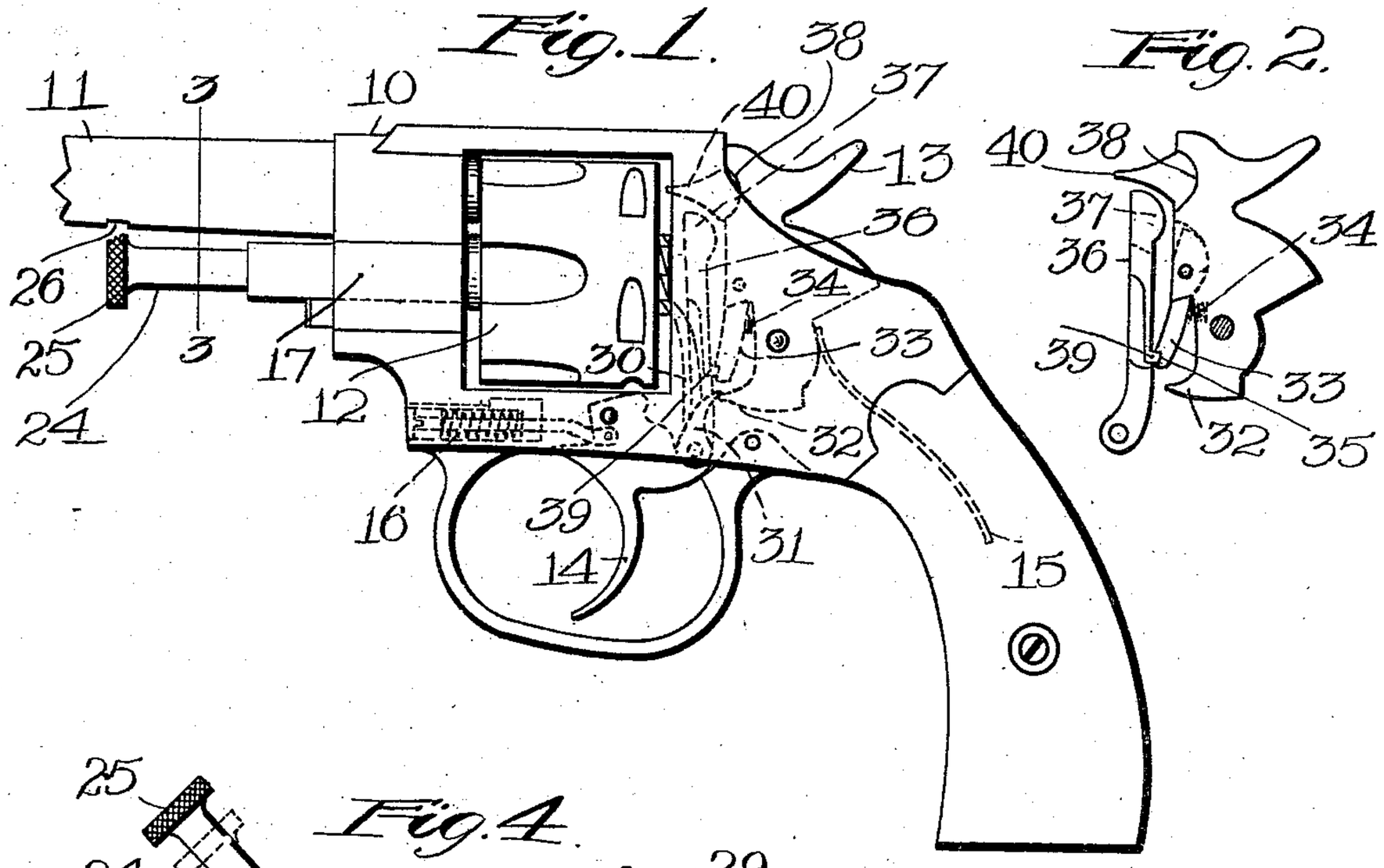


Fig. 2.

Fig. 4.

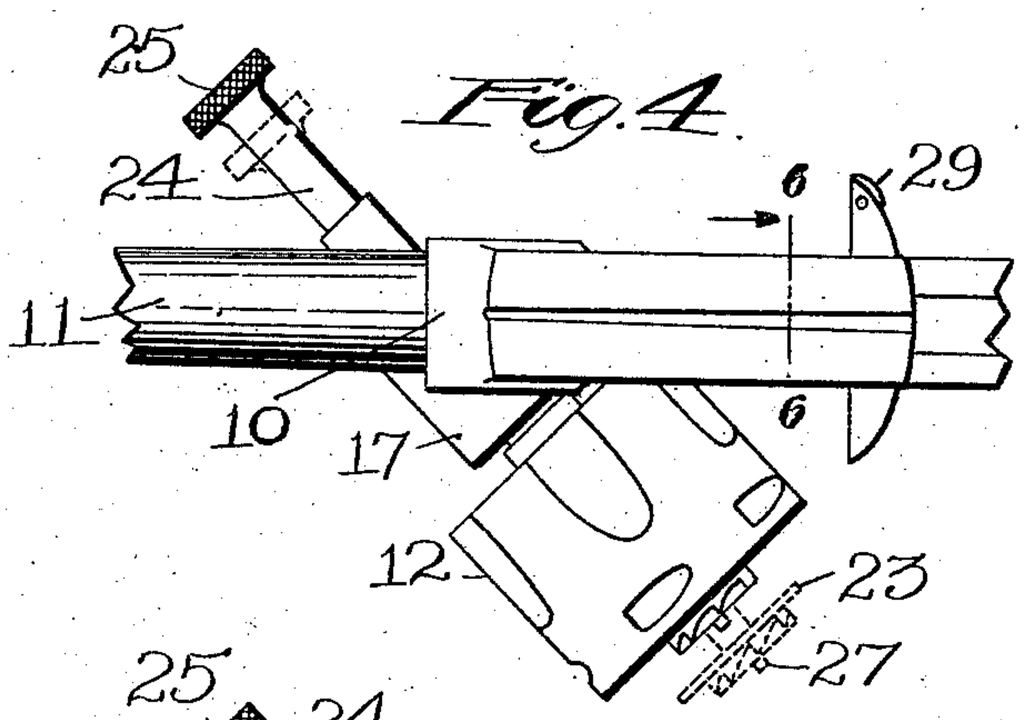


Fig. 3.

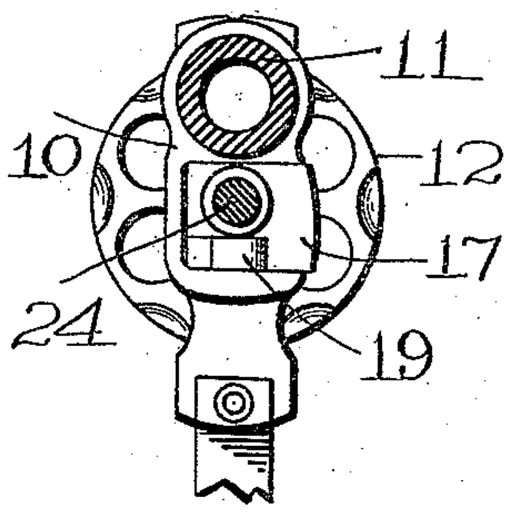


Fig. 5.

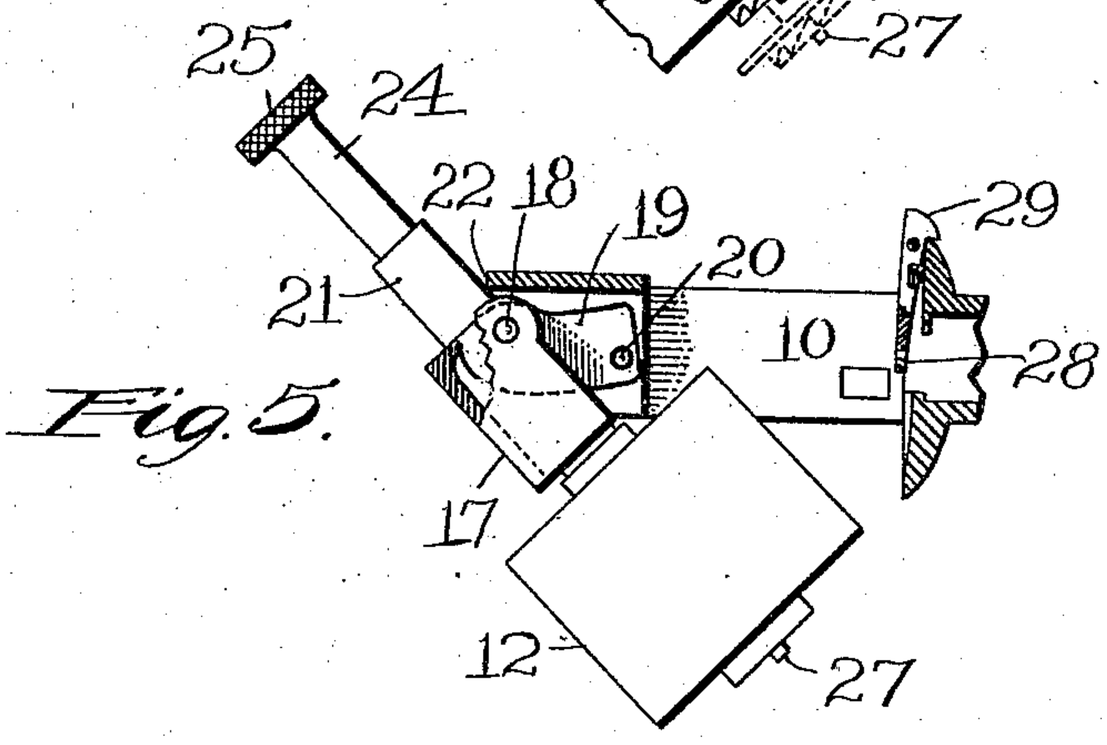
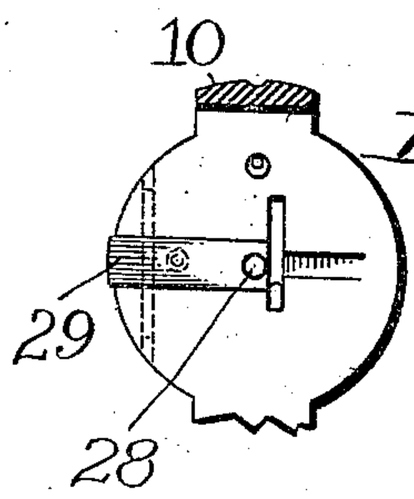


Fig. 6.



Witnesses:
C. F. Mason
E. M. Allen.

Inventor
Andrew Fyrberg
By Attorneys
Southgate & Southgate.

UNITED STATES PATENT OFFICE.

ANDREW FYRBERG, OF HOPKINTON, MASSACHUSETTS.

FIREARM.

945,320. Specification of Letters Patent. Patented Jan. 4, 1910.

Application filed February 1, 1909. Serial No. 475,410.

To all whom it may concern:

Be it known that I, ANDREW FYRBERG, a citizen of the United States, residing at Hopkinton, in the county of Middlesex and State of Massachusetts, have invented a new and useful Firearm, of which the following is a specification.

This invention relates to a firearm and while capable of general use is particularly adapted for revolvers.

The principal objects of the invention are to provide an improved means for swinging the cylinder out from the frame; to provide an improved construction of manually operated extractor; and to provide an improved construction of safety and rebounding device connected with the trigger and operated directly thereby so that the hammer will be positively prevented from being fired when the trigger is in any intermediate position and so arranged that this safety arrangement will let go of the hammer when the trigger is pulled back to the limit of its stroke.

Further objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawings, in which—

Figure 1 is a side elevation of a revolver showing a practicable form of the invention applied thereto; Fig. 2 is a side elevation of certain parts of the same removed from the frame; Fig. 3 is a transverse sectional view on the line 3—3 of Fig. 1; Fig. 4 is a plan of a portion of the frame showing the cylinder swung outwardly and the extractor in operative position; Fig. 5 is a horizontal sectional view of the same showing the parts in the same position; and Fig. 6 is a sectional view on the line 6—6 of Fig. 4 with the cylinder removed.

The revolver is shown as provided with a frame 10, barrel 11, cylinder 12, hammer 13, trigger 14, hammer-spring 15, and trigger-spring 16, all of which can be arranged in any well-known way, but having certain features constituting a part of this invention. The cylinder is mounted on a block 17 which swings on a vertical pivot 18 that is supported by a link 19 which in turn swings on a vertical pivot 20 mounted on the frame. The cylinder has a forward extension 21 which engages the edge 22 of the frame as the cylinder swings out to limit its outward motion. This extension and the link under it fill a side opening in the frame. It will be seen that the cylinder has a compound motion and that the first part of its motion is almost entirely on the pivot 18 as a center when that pivot is in its original position in the frame, but that as it swings outwardly this pivot itself swings on the pivot 20, and consequently the cylinder is released from the frame in a very rapid manner and can be brought out to the side very quickly and with very little trouble. In the cylinder is an extractor 23 as usual provided with a rod 24 extending forwardly and having a head 25 thereon by which the extractor can be operated by hand. When these parts are closed up into the frame, the edge of the head 25 engages in a notch 26 in the barrel and the extractor is firmly held in position. On the inner end of the extractor is a pin 27 adapted to engage a recess 28 in a spring-pressed catch 29 supported by the frame. This constitutes a positive holding means for the extractor and cylinder.

The trigger is provided with a pawl 30 for operating the cylinder as is well understood. It is also provided with a pawl 31 for operating the hammer, this pawl being pivoted on the back of the trigger. The hammer has a forwardly extending projection 32 at the bottom which the pawl 31 is adapted to engage. The other side of the notch usually provided above this projection is bounded by a spring-pressed member 33 pivoted on the hammer and normally projected forward therefrom by a spring 34. In the end this has a notch 35. Pivoted on the back of the trigger is a reciprocating bar 36 constituting a rebounding and safety device. It is shown as provided with two projections 37 fitting in notches 38 in the hammer when the safety is moved to its uppermost position when drawn back by the hammer. This permits the arm to be fired. In any other position, however, this projection 37 would engage the hammer and absolutely prevent the discharge of the firearm.

On the member or safety 36 is located a fixed projection 39 adapted to engage in the notch 35. It will be seen that when the trigger is in any intermediate position the bar 36 is also in an intermediate position and the projection 39 prevents the hammer from descending. When the trigger is drawn clear back the projection 39 slips off the edge of the notch 35 and permits the hammer to be operated in the usual way, the safety then

being in its uppermost position for permitting the discharge of the arm. It will be seen that the safety, which on account of the shape of the projection 37 constitutes a rebounding device, is operated solely by the trigger and trigger spring, and that no other rebounding device is required, and that in addition to the prevention of accidental firing due to the presence of the safety 36 the connection of the safety with the member 33 affords further protection against accident, and thus there is absolutely no danger of accidental discharge even with the roughest kind of handling.

It will be seen that the firing pin 40 is shown as located directly on the hammer and integral therewith, and that the safety is bifurcated and receives the firing pin between its bifurcations.

While I have illustrated and described a preferred embodiment of the invention I am aware that many modifications may be made therein by any person skilled in the art without departing from the scope of the invention as expressed in the claims. Therefore I do not wish to be limited to all the details of construction shown, but

What I do claim is:

1. In a firearm, the combination of a frame, a cylinder movably mounted thereon and adapted to turn outwardly at one side on a vertical axis, a rod extending from the front of the cylinder, an extractor on said rod, said rod having a head thereon, and a barrel extending from the frame and provided with a notch for receiving said head.

2. In a firearm, the combination of a frame, a cylinder pivoted on a vertical axis in front of the cylinder to move outwardly from the side thereof, a manually operable extractor rod extending from the cylinder and movable therewith, and a barrel having means for holding the extractor rod until the cylinder is moved out at the side.

3. In a firearm, the combination of a frame, a link pivoted thereon on a vertical axis and extending forward from its pivot, a cylinder pivoted on the link on a vertical axis forward of the first named axis, whereby said cylinder is movable by a compound swinging movement in a plane, said frame having means for limiting the motion of said cylinder.

4. In a firearm, the combination of a frame, a cylinder adapted to swing about a vertical axis in front of it, and means for connecting the cylinder with the frame, said means being adapted to swing about a vertical axis between the cylinder and the first named axis, whereby said cylinder has a compound swinging motion.

5. In a fire arm, the combination of a frame, a link pivoted thereon on a vertical axis and extending forward from its pivot, and a cylinder pivoted on the link on a vertical axis forward of the first named axis, whereby said cylinder is movable by a compound swinging movement in a plane.

6. In a firearm, the combination of a frame, a cylinder thereon movable outwardly therefrom, a hammer, a trigger, means connected with the trigger for rotating the cylinder, a pawl pivotally mounted on the back of the trigger, said hammer having a forwardly extending projection at the bottom, a spring-pressed pivoted member on the hammer above said projection leaving a space between them into which said pivoted pawl enters, and means connected with the trigger for controlling the operation of said pivoted member.

7. In a firearm, the combination of a hammer, a trigger, a rebounding device and safety directly connected with the trigger and mounted in front of the hammer, a pivoted member on the front of the hammer having a notch in the end thereof, and a projection on said rebounding device and safety for engaging in said notch.

8. In a firearm, the combination of a hammer, a trigger, a slidable rebounding and safety device pivoted to the rear of the trigger having a projection provided with gently inclined surfaces and movable to safe position when the trigger is in any position except in that in which the hammer is cocked or released for firing, the upper part of the hammer having a notch with gently inclined surfaces fitting said projection, whereby the hammer will be rebounded as the trigger moves forward after firing, the forward edge of the hammer having a second notch, and a second projection on said rebounding and safety device for engaging said second notch for preventing the descent of the hammer except when the trigger is in its rearmost position, and controlling the firing of the arm.

9. In a firearm, the combination of a hammer, a trigger, a bar pivoted to the trigger and movable up and down in front of the hammer, said bar being provided with a projection, a spring-pressed member on the front of the hammer having a notch therein for receiving said projection, said notch and projection being located in position to prevent descent of the hammer when the bar is elevated into any intermediate position and permit the projection to slip over the notch when the bar is lifted to its highest position and the trigger is drawn clear back.

In testimony whereof I have hereunto set my hand, in the presence of two subscribing witnesses.

ANDREW FYRBERG.

Witnesses:
GEORGE W. SMITH,
EDGAR A. BRIGGS.