

J. H. WESSON.
 SAFETY DEVICE FOR REVOLVERS.
 APPLICATION FILED JUNE 18, 1909.

961,188.

Patented June 14, 1910.

Fig. 1.

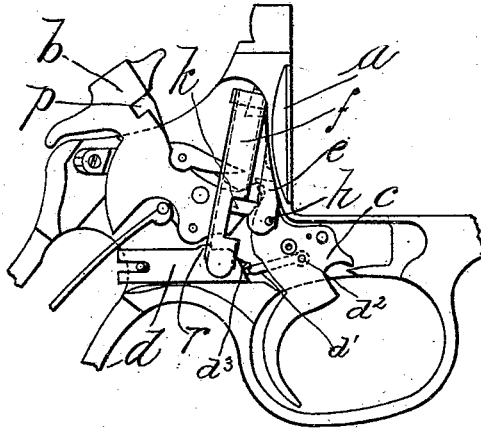


Fig. 5.

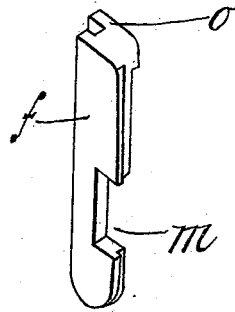


Fig. 2.

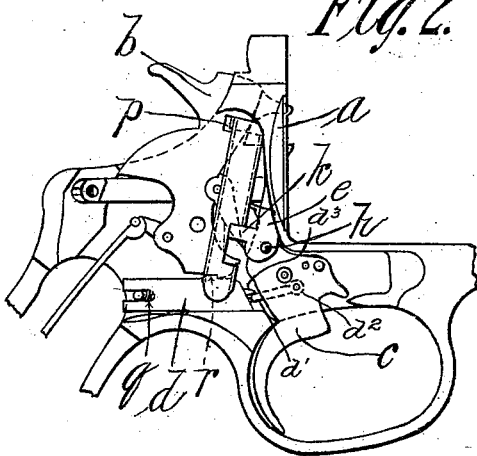


Fig. 3.

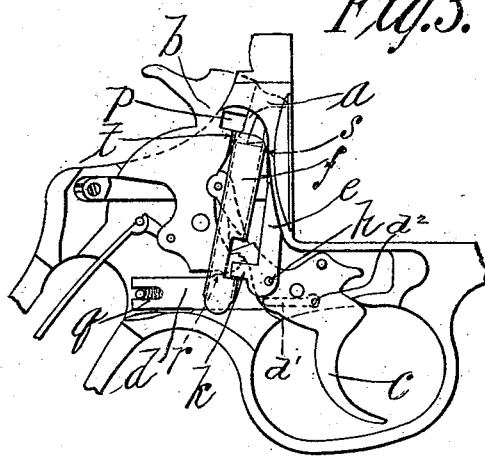
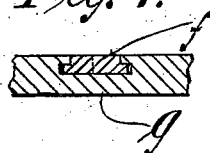


Fig. 4.



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SAFETY DEVICE FOR REVOLVERS.

961,188.

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To all whom it may concern:

Be it known that I, JOSEPH H. WESSON, a citizen of the United States of America, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Safety Devices for Revolvers, of which the following is a specification.

This invention relates to firearms and specifically to a novel construction of a safety stop for the hammer whereby it may be positively blocked in inoperative position when the hammer is down.

The invention consists in the construction shown in the accompanying drawings and described and claimed in the following specification.

In the drawings forming part of this application,—Figure 1 is a side elevation of the lock mechanism of a revolver with the hammer in cocked position and having the invention applied thereto. The side plate has been removed and a piece of the mechanism supported thereon has been shown in its proper relation to the other parts. Fig. 2 is the same as Fig. 1 with the exception that the trigger has been pulled back farther to release the hammer which is shown in the position it would occupy with its nose in contact with the primer of a cartridge. The position of the other parts of the mechanism is substantially the same as that shown in Fig. 1. Fig. 3 is substantially the same as Fig. 2 except that the trigger has been released and the hammer-retracting mechanism thereby rendered operative to retract the hammer and has, by that action, effected the interposition of a block between the face of the hammer and the frame. Fig. 4 is a cross sectional view on an enlarged scale of a portion of the side plate and the sliding block supported therein, the end of which is interposed between the hammer and the frame in the manner to be described. Fig. 5 is a perspective view on an enlarged scale of the sliding block which is interposed between the hammer and the frame.

Referring now to these drawings, *a* indicates the frame of the arm; *b* the hammer; *c* the trigger; *d* the hammer-retracting block, *d*¹ being an arm pivoted on the trigger at *d*², the end of which bears on the end of the block *d* and pushes it back against a spring referred to farther on when the trigger is pulled back to the position shown in Fig. 2;

*d*³ is a projection on the end of the block *d* to hold the end of the arm *d*¹ in position; *e* the hand to rotate the cylinder; *f* a sliding block mounted in a suitable groove in the side-plate *g* (see Fig. 4) the upper end of which is, by the action of the hammer-retracting block *d* interposed between the hammer and the frame to positively block the forward movement of the hammer,—a perspective view of this block being shown in Fig. 5. This block has a free sliding movement in the side-plate *g* in a rabbeted or other shaped groove therein whereby it may be held in position. Its position is near, and substantially parallel with, the hand *e*, the latter being pivotally supported on the trigger at the point *h*, and near the lower end of the hand there is formed thereon a rearwardly extending projection *k*. The end of this projection enters the rectangular recess *m* in the forward edge of the sliding block *f*, and when the trigger is pulled, the upper edge of the projection *k* on the hand comes in contact with the upper border of the recess *m* of the block *f* carrying the latter up with it, as the hand is moved upward to rotate the cylinder. This same movement of the trigger cocks the hammer *b* in the self-cocking type of revolvers, and when the hammer is at full cock, as shown in Fig. 1, the sliding-block *f* will have been raised to such a position that the offset upper end thereof on the inside of the block, indicated by *o*, will be so positioned that when the hammer falls, this projecting block *o* will enter a recess *p* in the breast of the hammer thus permitting the nose of the latter to reach the primer of the cartridge through the recoil plate in the usual manner. When this action takes place, the parts will be in the position shown in Fig. 2. The hammer is retracted from this last named position to the position shown in Fig. 3 by the release of the trigger *c*, and when the pressure on the trigger is reduced, a spiral spring *q* in the retracting block *d* pushes the latter forward moving the trigger forward and forcing the projection *r* on the top of the block (shown only in dotted lines) against a projection on the lower edge of the hammer, thus retracting the nose of the latter from its advanced position shown in Fig. 2, to the position shown in Fig. 3. This forward movement of the retracting block *d*, when it causes the trigger to swing forward, also causes the

hand to be swung downward, and this downward movement of the hand will cause the lower edge of the projection *k* thereon to come to a bearing against the lower border of the recess *m*, thus pulling the offset projection *o* on the upper end thereof downward to a position below that occupied in Fig. 2, to that occupied in Fig. 3, which will locate, as shown in said last-named figure, the offset portion *o* on said sliding-block between the frame at the point *s* and the hammer at the point *t*. This movement of the sliding-block *f* follows the backward swinging movement imparted to the hammer by the block *d*, and the offset portion *o* of the sliding-block merely enters a space provided for it between the breast of the hammer and the frame and does not, of itself, impart any movement whatever, to the hammer. Thus the portion *o* of the sliding-block is merely an interposed obstruction of solid metal between the frame and the hammer which would receive the latter should anything occur which might effect the withdrawal of the hammer-retracting block *d* from its position of support for the hammer, or should the hammer be struck such a blow from behind as to break down that support, the block *o* would still prevent contact between the nose of the hammer and the primer of the cartridge.

If the hammer be cocked by the thumb, the action of the hand and slide block will be the

same as when the hammer is actuated by the trigger.

What I claim, is:—

1. The combination with the frame of a revolver of a slide-block having free endwise movement on a part of the frame, a hand to rotate the cylinder, a trigger and hammer, and means to retract the hammer after the fall thereof, a projection on the hand to engage the slide-block to move the latter out of and into position to block the movement of the hammer toward the recoil-plate.

2. In a revolver, a hammer and trigger, and a hand connected with the trigger, together with a slide-block actuated by the movement of the hand into position to block the fall of the hammer, and a hammer-retracting mechanism operable to retract the hammer in advance of the movement of the hand to actuate the slide-block.

3. In a revolver, a hammer and trigger and hammer-retracting mechanism, a hand connected to the trigger, and a slide-block located near the hand and with which the latter has a lost motion connection, whereby limited movement for the hand in either direction is permitted while the slide-block is stationary.

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