Nov. 1, 1955 J. H. WEIMER ET AL 2,722,073

TOY FIREARM WITH SLIDABLE MAGAZINE COVER

Filed July 10, 1953 2 Sheets-Sheet 1

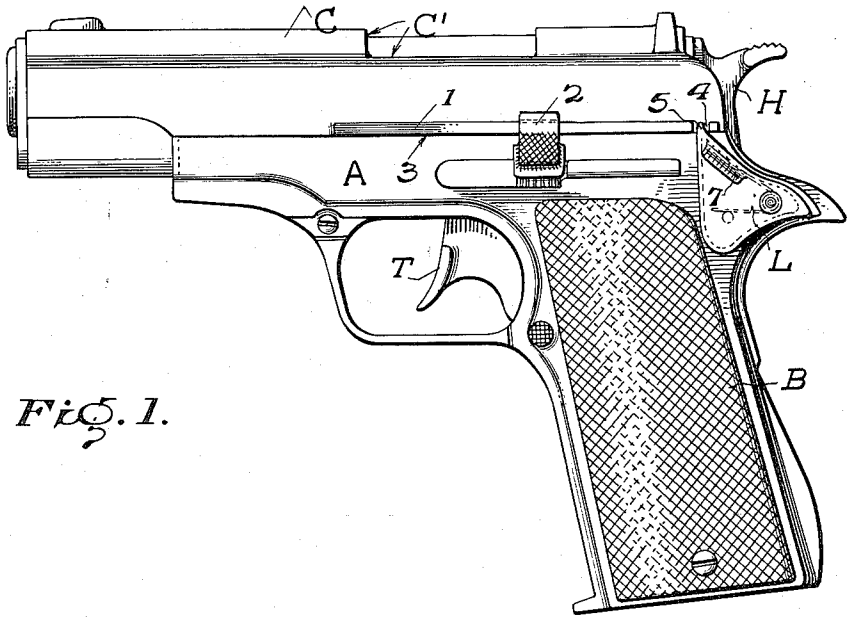


Fig. 1.

Fig. 2.

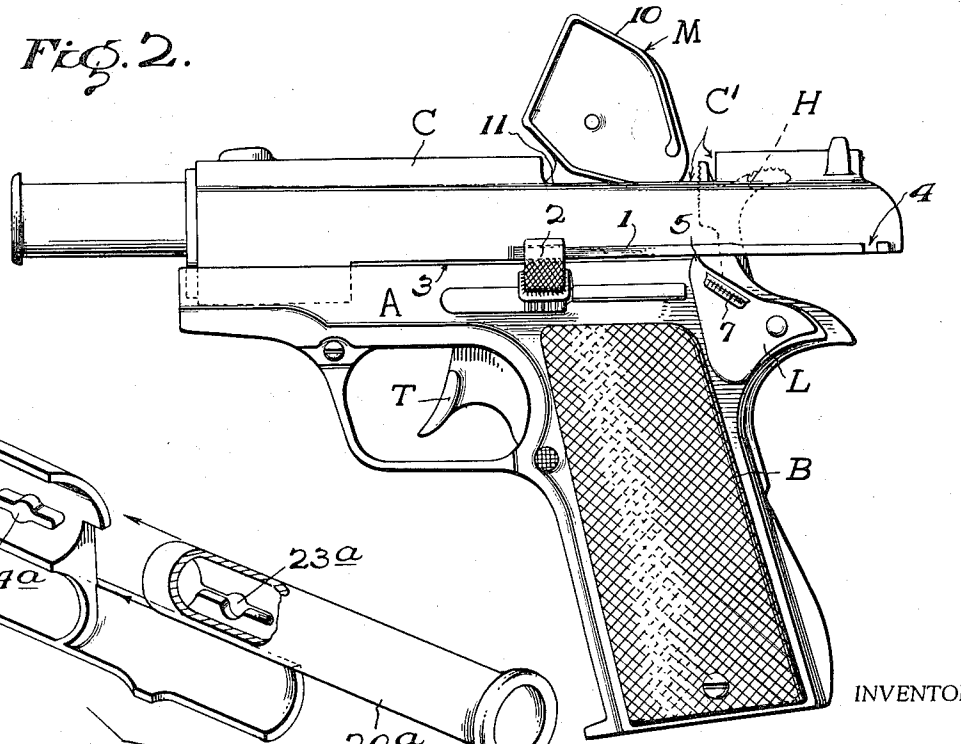


Fig. 8.

INVENTORS

John H. Weimer

Harry J. Rockey, Sr.

BY

ATTORNEY

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Fig. 3.

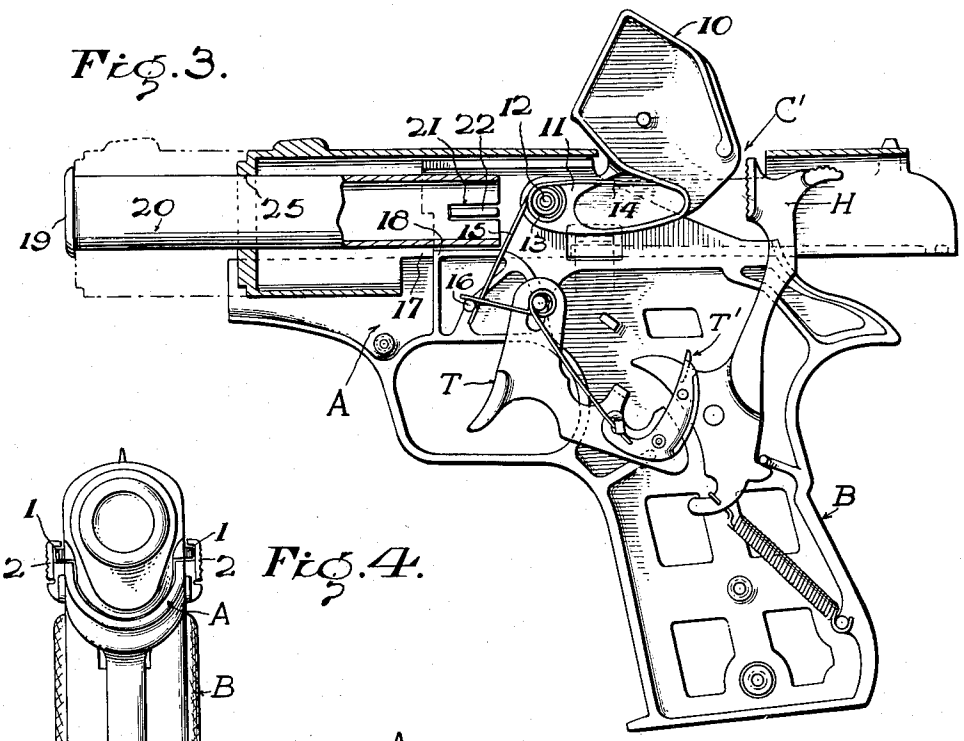
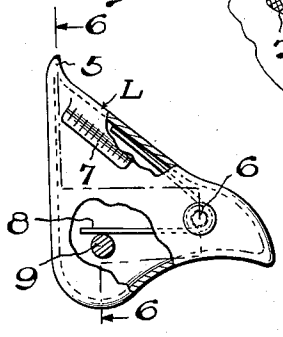


Fig. 4.

Fig. 5.



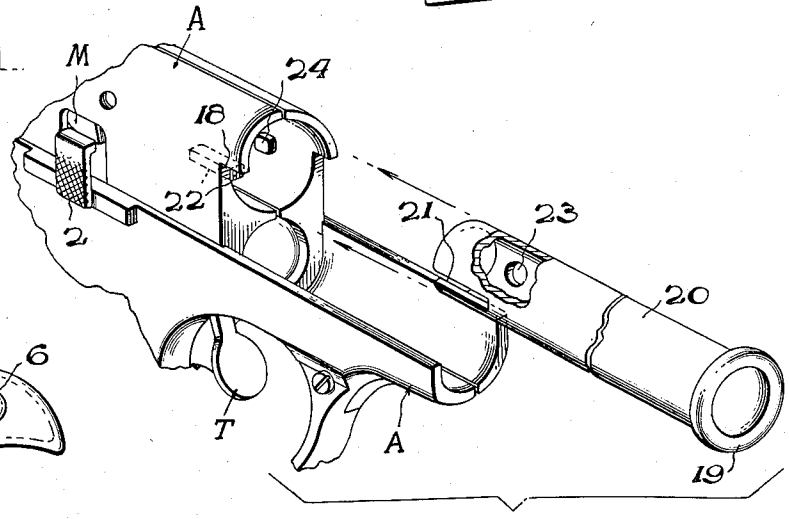


Fig. 7.

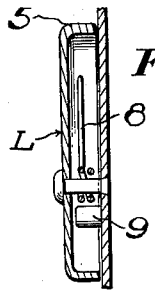


Fig. 6.

INVENTORS

John H. Weimer

Harry J. Rockey, Sr.

BY

ATTORNEY

United States Patent Office 2,722,073 Patented Nov. 1, 1955

2,722,073

TOY FIREARM WITH SLIDABLE MAGAZINE COVER

John H. Weimer and Harry J. Rockey, Sr., Lancaster, Pa., assignors to The Hubley Manufacturing Company, Lancaster, Pa., a corporation of Pennsylvania

Application July 10, 1953, Serial No. 367,231

8 Claims. (Cl. 42—57)

This invention relates to toy firearms, and more particularly to cap pistols of the repeater type.

One of the objects of the invention is to provide a new arrangement of parts for providing ready and simple means for access to the magazine which holds a reel of caps. In that connection, one of the features of the invention is to make a construction wherein the magazine is normally spring biased to open position for loading, and which may be depressed manually and held normally in firing position by the manipulation of a sliding cover or hood mounted on top of the barrel.

A further object of the invention is to provide a reliable and practical construction which lends itself to appropriate manufacturing procedures, and which also provides a toy pistol which is attractive and safe in its operation.

With the above and other objects in view, which will more readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination, and arrangement of parts hereinafter more fully described, illustrated and claimed.

A preferred and practical embodiment of the invention is shown in the accompanying drawings, in which:

Figure 1 is a side elevation of the pistol in operating position;

Figure 2 is a side elevation with the hood or cover moved rearwardly on the pistol body to permit the spring pressed magazine to be projected to loading position;

Figure 3 is a vertical sectional view of the parts shown in the position of Figure 2;

Figure 4 is a partial front elevation;

Figure 5 is an enlarged detail view of the latch for holding the cover in the position shown in Figure 1;

Figure 6 is a vertical sectional view taken on the line 6—6 of Figure 5;

Figure 7 is a detail fragmentary perspective view showing the manner of mounting the tubular locking element for the sliding cover, the latter being removed for sake of clarity.

Figure 8 is another detail fragmentary perspective view illustrating a modification of the illustration shown in Figure 7.

Similar reference characters designate corresponding parts throughout the several figures of the drawings.

As will be seen from the several views heretofore described, the pistol includes a body A provided with the usual handgrip B, and having a simulated barrel C in the form of a cover mounted for sliding movement on the body A and normally concealing related parts on the body.

The construction includes a trigger T for operating a hammer H rapidly to detonate caps on the tape reel held within the magazine M pivotally mounted on the body A and spring biased to projected position through a slot in the cover C, as will presently appear more in detail.

As an aid in understanding the construction about to be described, it may be pointed out that when the cover C simulating the barrel is in the position shown in Figure 1, the magazine M is held depressed. When it is desired to reload the magazine M, the latch L may be manually moved downward to release the cover C simulating the barrel so that it may be manually moved rearwardly until the slot C′ in the cover registers with the magazine M, whereupon its biasing spring will move the magazine upwardly through the slot to permit free access for loading a fresh tape.

The cover C simulating the barrel, in addition to the slot C′, is provided on each of its opposite side walls with longitudinal ribs 1 which pass beneath the hooked portions of the guides 2 on the body A so that the lower edges of the cover C may be shiftably held to the upper side surfaces 3 of the body. The rear portions of the ribs 1 are provided at 4 with an open keeper notch for receiving the detent end 5 of the latch L so that when the latch L is in the position shown in Figure 1, the detent end 5 will enter the notch 4 in one of the guide ribs and hold the cover in the position shown in Figure 1.

The latch L is hollow as will appear from Figure 6, and is pivotally mounted on a support 6 on the body and having its head peened or riveted to guard against the latch sliding off. The latch also includes a laterally offset finger engaging element 7 by which the user can swing the latch downwardly upon applying finger pressure. Also, it will be noted that the hollow body of the latch affords a cover for a spring 8 for normally biasing the latch upwardly. This spring has a central coil portion surrounding the support 6 and one of its free ends bears against the inside wall of the hollow latch, while the other end of said spring bears against a post 9 projecting laterally from the body to thereby place the latch under control of the spring for the movement previously indicated.

The hammer H and trigger T are of the conventional repeater type wherein pressure on the trigger automatically cocks the hammer and, at the same time, actuates a tape feeding arm T′ in conjunction with the anvil portion 10 of the magazine.

The magazine M is provided with a tail portion pivoted to the body on a pin or post 12. The magazine is spring biased to open position by a spring including an intermediate coiled portion 13 and has one arm 14 positioned in a crotch formed between the body of the magazine and the tail portion 11, while the other arm 15 bears against the post 16 on the body. Thus, it will be seen that the magazine will be normally urged upwardly and is restrained in firing position when the cover C is in the position shown in Figure 1.

The cover C simulating the barrel is, as previously indicated, slidably held to the body A by the keeper guides 2. When the latch L is depressed to withdraw detent end 5 from keeper notch 4, the cover C may be moved rearwardly until the internal web 17 thereof abuts against the shoulder 18 of the body, thus insuring that the cover cannot slide rearwardly too far to prevent the slot C′ therein from registering with magazine M to permit the same to be projected to loading position. When the magazine M is projected to loading position, the cover cannot be slid forwardly because of the rear end of the slot encountering the magazine. However, when the magazine is manually depressed and the cover moved forwardly manually, it is preferred not to rely on the detent end 5 and keeper notch 4 for preventing further sliding movement of the cover. That is to say, the forward movement of the cover is also limited by the flanged head 19 of a tubular member 20. The inner end of this member is provided with a longitudinal key slot 21 for receiving the key 22 on the body to prevent the rotation of 20 relative to a keeper opening 23 for engaging the internal lug 24 cast on the body. In other words, the slot and key serve relatively to locate the opening 23 and the

lug **24** so that they will properly register when the tubular member is simply pushed into the opening **25** in the front wall of the cover and thence into the front end of the body as shown in Figure 3.

Figure 8 illustrates a modified form of locking means for the tubular member. Referring to this figure, it will be seen that the tube **20***a* which performs all of the functions of the tube **20** is provided near its inner end with a key slot **23***a* which includes a straight-way portion and an intermediate circular portion for receiving the lug **24***a* having a configuration similar to that of the slot. The lug **24***a* is, of course, mounted on an inner wall of the body so that when the tubular member **20***a* is pushed in the open end **25** of the body, it may be rotated until the open inner end of the slot **23** registers with the outer flat end of the lug **24***a*. Once the slot is in registry with the lug, it is only necessary to push the tubular **20***a* inwardly until the slot **23***a* fully receives the lug **24***a*, to be interlocked therewith because the central and large portion of the lug will fit into the center and large portion of the slot.

From the foregoing, it will be seen that the distinctive feature of the present invention is that the magazine is controlled, as to its firing and loading positions, by a slotted sliding cover simulating a barrel, while in the example shown the cover C is manually shifted on the body, that is, manually moved rearwardly upon release of the latch and manually moved forwardly when the magazine is depressed, nevertheless, it is within the scope of the invention to use a suitable spring arrangement to move the cover rearwardly when released by the latch.

It will, of course, be understood that other changes may be made within the scope of the appended claims.

We claim:

1. A toy firearm including a body, a cap reel magazine pivoted to the body and spring biased to open position, a cover slidably mounted on the body and normally holding the magazine in depressed, closed position, said cover having a slot which upon registering with the position of the magazine permits the same to be projected to open position for loading.

2. A toy firearm including a body having a depending handgrip, a cap reel magazine pivoted to the body above the handgrip and spring biased outwardly from the body, a cover simulating a barrel and having a slot, said cover overlying the magazine and normally holding the same in closed position and means for slidably mounting the cover on the body to permit the slot of said cover to be brought into and out of registry with the magazine.

3. A toy firearm including a body, a magazine pivoted to the body and spring biased to open loading position, a cover simulating a barrel and having a slot therein, said cover overlying the magazine and normally holding the said magazine in firing position, guide ribs on the cover, one of said ribs having notch means, means on the body cooperating with said guide ribs to slidably hold the cover to the body, means for limiting the forward movement of the cover, and pivoted latch means on the body and cooperating with the notch means on the related rib to hold the same in position to depress the magazine and hold it in firing position, said latch when manipulated to release the cover permitting it to be moved rearwardly until the slot registers with the position of the magazine to enable the latter to be projected to open loading position.

4. A toy firearm including a body, a magazine pivoted to the body and spring biased to open loading position, a cover having a slot therein, said cover overlying the magazine and normally holding said magazine in firing position, guide ribs on the sides of the cover, means on the body cooperating with said guide ribs to slidably hold the cover to the body, means for limiting the forward movement of the cover, and cooperating keeper and latch means respectively on the cover and the body for holding the cover in its forward position with its slot out of registry with the location of the magazine to maintain said magazine depressed and in firing position, said latch when released from its keeper means permitting the cover to be moved rearwardly until the slot in the cover registers with the location of the magazine to permit it to be projected to open loading position.

5. A toy firearm according to claim 4, wherein the means for limiting the forward movement of the cover comprises a lug on the interior of the body and a tubular member flanged at its outer end to provide a cover stop and having an opening at its inner end to engage the lug on the interior of the body.

6. A toy firearm according to claim 4, wherein the means for limiting the forward movement of the cover includes a lug and a key oppositely located on the internal portion of the body, and a tubular member flanged at its outer end to provide a stop for the sliding cover and having a key slot and an opening for respectively engaging said key and lug to lock the tubular member in the body.

7. A toy firearm according to claim 4, wherein the means for limiting the forward movement of the cover includes a lug on the internal portion of the body, said lug having an enlarged center portion and narrow oppositely extending projections, and a tubular member flanged at its outer end to provide a stop for the sliding cover and a key slot having a configuration corresponding to the shape of said lug for receiving and interlocking with said lug when the tubular member is fitted into the body.

8. A toy firearm according to claim 4, wherein the latch means comprises a hollow body of substantially triangular formation pivotally supported on the body, a post on the body, a spring surrounding said means for pivotally mounting the latch on the body and having one leg engaging said post and the other end engaging an inner side wall of the body, a detent formed on the end of the latch member, and a laterally projecting finger engaging portion on the outer wall of the latch.

No references cited.