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F. MÖLLER ET AL

SCARING PISTOL

Filed June 4, 1927

Fig. 1.

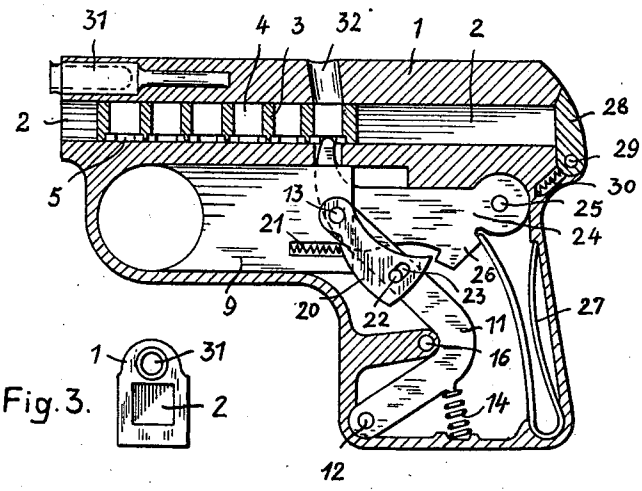



Fig. 3.




Fig. 2.

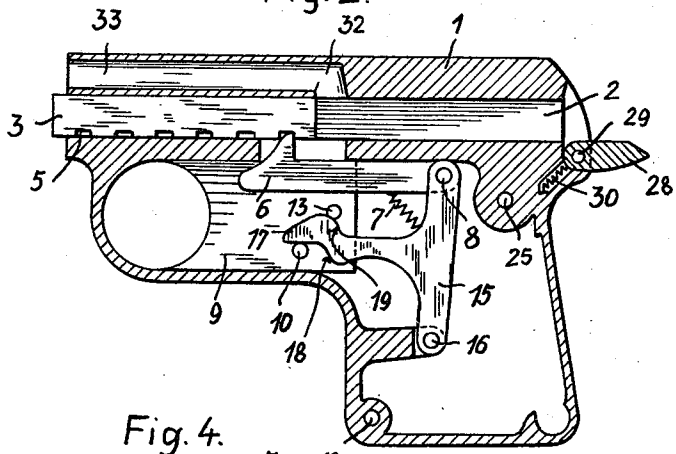
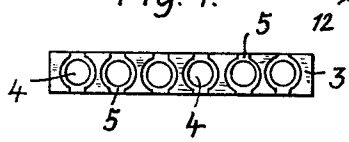



Fig. 4.

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# UNITED STATES PATENT OFFICE.

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## SCARING PISTOL.

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This invention refers broadly to scaring or frightening sham pistols, to be employed both as toys or article of entertainment, as well as a means of frightening outlaws and burglars and for other purposes and it is intended to generally improve the construction and to facilitate the manipulation, and increase the reliability of such devices, and to make them as much as possible exempt from danger, and to simplify the manufacture thereof. The invention is in particular concerned with scaring pistols with displaceable charging strip and of the general type constituting an exact imitation of the usual sharp small-caliber-pistols. The particular objects of the invention and the deceptional character of the device and of its exterior shape are accomplished according to this invention by a comparatively simple and advantageous construction and arrangement of the interior mechanism thereof. Among other important elements this mechanism is particularly distinguished by the fact that the tensioning and charging path through which the trigger is moved is less than the space through which the loading strip is caused to move between two shots; and in view thereof and of other important objects the said trigger or the like is connected to a tensioning lever pivoted thereto and is caused to cooperate with a spring acting pawl or the like adapted to become engaged with the rear part of a shoulder, projection, cam or the like of the cock, so as to tension said cock and to release the same upon continuing the rotation of the lever referred to. On the other hand, the trigger or the like, upon being actuated by a pin or equivalent means is adapted to become engaged with a curved surface, cam or the like provided on the conveying or moving lever for the feeding pawl or the like which is spring actingly engaging with the recesses of the charging or loading strip, so that the said strip upon each operation of the trigger or the like may be displaced through a certain distance of smaller extent than the tensioning distance, while upon the backward movement of the trigger or the like or of the arresting pawl now out of engagement with the recess of the charging strip, said strip is arrested by the then released cock.

The invention will be more fully described and its mode of operation set forth by reference to the accompanying drawing, showing by way of exemplification a pistol according to this invention in two different forms of embodiment in longitudinal section. Figure 1 represents one and Figure 2 the other form of the said two embodiments. Figure 3 is a front elevational view of Figure 1 showing the extremity of the barrel. Figure 4 is an illustrative exemplification of the charging or loading strip seen from below.

In the upper portion of the piston casing 1 a preferably cross-sectionally rectangular passage or channel 2 is provided extending along the entire length of the pistol. This so-called charging or loading-strip tunnel is adapted for the insertion of the charging or loading strip 3 provided with a plurality of cartridge sockets and with a corresponding number of recesses 5, the said strip being retained in position by a feeding or conveying pawl 6 forced upwards into the tunnel by a spring 7 and engageable with one of the depressions or recesses 5. Side by side of the slot-like aperture for the feeding pawl 6 a smaller opening is provided for the passage of the igniting point or head of the cock 24. Vertically above the tunnel and communicating therewith a bore or port 32 is provided for the escape of the powder gases and smoke, this port opening out directly into the open air in the exemplification of Figure 1, while in the exemplification according to Figure 2 the port 32 terminates in a channel 33 opening out at the front end of the barrel. In order to prevent the smoke and powder gases from escaping at the rear end of the tunnel 2, this part is provided with a lid 28 under the influence of the spring 30 and pivoted on the stud 29. In the embodiment according to Figure 1 a so-called ejector 31 is disposed in the upper portion of the casing above the charging-strip tunnel 2 and at the front end of the pistol for the expulsion of the empty shells from the charging strip 3, the said ejector being preferably provided at its front part with a small notch or groove, so as to facilitate its removal from the casing. The ejector 31 may preferably carry a small bore at its front end, so as to simulate the imitation of a pistol barrel. Below the loading or charging strip 3 the trigger or the like 9 is provided, adapted to slide in a corresponding guide or bore, and being guided by a rocking lever, the tensioning lever 11

fulcrumed at 12, the said tensioning lever being connected to the trigger 9 by a pin 13. A spring 14 in the lower portion of the pistol casing forces the tensioning lever 11 with the trigger in the forward direction. A substantially T-shaped feeding or conveying lever 15 is connected by pivotal or link connection 8 to the feeding pawl 6 referred to and is itself pivoted on the stud 16. The front end 17 of the lever 15 is provided with curves or cam surfaces 18, 19, adapted to become engaged with the projecting pins 10, 13 which are disposed on the trigger 9. The curves or cam surfaces are arranged in such a manner that, in case of the withdrawing of the trigger 9 during the first third of its path the feeding lever 15 is locked while during about the second third of the path of the trigger, the feeding lever 15 is moved by the engagement of the pin 10 with the curve 18, so that said feeding lever with the feeding pawl 6 becomes adapted to move the loading strip 3 backwards for the distance between two cartridge sockets. During the last third of the trigger movement however, the feeding lever 15 is arrested in its position, but its forward leg 17 has become engaged with the pawl 6, so that the pawl will thereby securely lock the loading strip 3. When the order of operations takes place in the opposite direction that is to say, when the trigger is moved forward, the second pin 13 thereof becomes engaged with the corresponding curve 19 and thereby causes the feeding lever 15 to be moved into its initial position, thereby also causing the feeding pawl 6 to be forced out of a recess 5 and to become engaged with the next recess by the action of a spring 7. The igniting head of the cock 24 retains the loading or charging strip 3 in its position. The pin 13 of the trigger or the like 9 is movably connected to the tensioning lever 11 by means of the tensioning pawl 20 which engages a pin 22 on the lever 11. This pin 22 enters a somewhat elongated opening of the tensioning pawl 20, thereby limiting the movement thereof and compelling the pawl to participate in the rocking movement of the lever 11. The spring actuating cock 24 under the influence of the spring 27 is adapted to oscillate somewhat on its pivot 25. Upon operating the trigger 9 and withdrawing the same, the tensioning pawl 20, as appears from the drawing, will be caused to be forced against a tooth or a lug or shoulder on the cock 24, thereby tensioning the cock and keeping it in this position, until, as a consequence of the rocking movement of the tensioning means the engaging projection of the pawl 20 becomes disengaged from the shoulder or lug 26 of the cock 24 which latter by spring action is made to strike with its igniting head for instance against the percussion cap of the cartridge. In the reverse movement of the trigger the tensioning pawl 20 avoids the lug or shoulder of the cock 24 and moves past thereof and is forced upwards by the pressure of a small spring 21 acting on the tensioning pawl 20, and thereby assumes its initial position in engagement with the shoulder or projecting lug of the cock 24. In this manner the cock is snappingly projected with its igniting head against the charging or loading strip 3 upon each movement of the trigger 9, the strip being thereby advanced for the distance of two recesses thereof. The feeding pawl 6 is disposed in such a manner that it may be depressed from the outside, so as to allow of the removal of the loading strip 3.

The main constituent parts of the pistol, particularly the casing, the loading or charging strip and other elements are preferably made of die-casting, so that the pistol may be manufactured with a minimum of manual labor, and with comparatively great accuracy and at small expense.

It will have to be understood that the invention is not restricted to the two particular embodiments herein shown and described merely by way of exemplification, but modifications and changes may occur within the scope and spirit of the appended claims.

We claim:—

1. In a scaring pistol in combination, a casing, a cartridge carrying loading strip within the casing and movable lengthwise thereof, smoke-educting means in the casing and cooperating with the strip, spring actuated feeding means engageable with the strip, a spring actuated cock, adapted for engagement with the strip and with the cartridges thereon, a trigger within the casing, a feeding lever, linked to the feeding means, a tensioning lever, engageable with the cock, link connection of the tensioning lever with the trigger, and cam actuating means on the trigger engageable with the feeding lever, and adapted to operate the feeding means and the cock upon the movement of the trigger.

2. In a scaring pistol in combination, a casing, a cartridge carrying loading carrier within the casing and movable therein, smoke educting means in the casing cooperating with the loading carrier, spring actuated feeding means engageable with the carrier, a spring actuated cock, adapted for engagement with the carrier, a movable trigger upon the casing, a feeding lever, linked to the feeding means, a tensioning lever, engageable with the cock, link connection of the tensioning lever with the trigger, cam actuating operating means on the trigger engageable with the feeding lever on opposite sides thereof, and cooperating with the tensioning lever.

3. In a scaring piston in combination, a cartridge carrier, a casing supporting said

carrier, a movable trigger on said casing, feeding means engageable with the carrier, a spring actuated cock, likewise engageable with the carrier, a feeding lever linked to the feeding means, a cam-shaped projection on the feeding lever, actuating pins on the trigger on both sides of the cam shaped projection and engageable therewith, a spring actuated link, pivoted on one of said pins and adapted for engagement with the cock, tensioning means rockably linked to said spring-actuated link.

4. In a scaring piston in combination, a casing, a cartridge carrier on said casing and movable with relation thereto, a substantially barrel-shaped shell-ejector adjacent the cartridge carrier at one end of the casing, a spring actuated cock in the casing engageable with the carrier, and feeding means engageable with the carrier, a movable trigger on the casing, an operating lever for the feeding means and tensioning means for the cock, and means on the trigger, engageable with the feeding means and with the tensioning means.

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