C. E. SNEIDER.

Rebounding-Locks for Fire-Arms.

No. 149,353. Patented April 7, 1874.

Fig. 1.

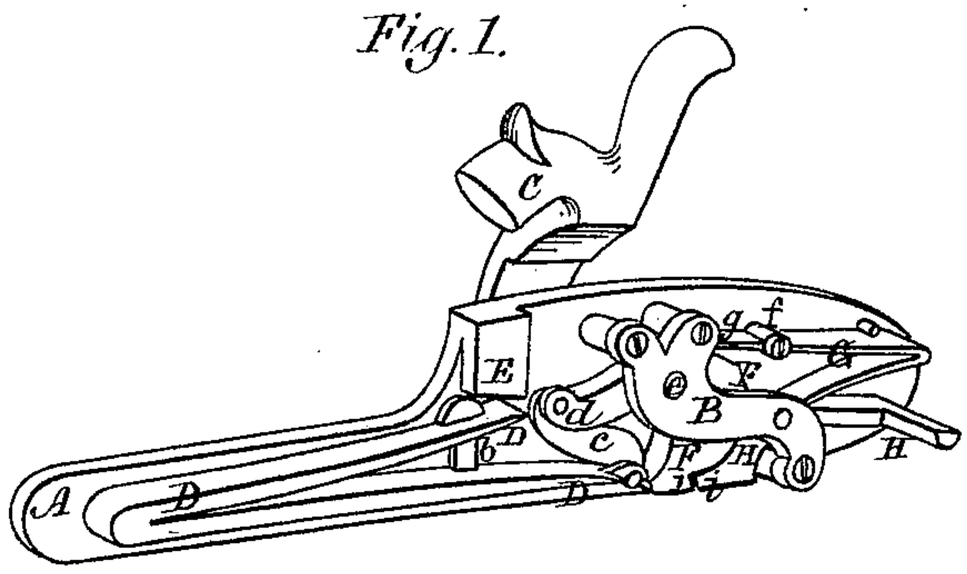
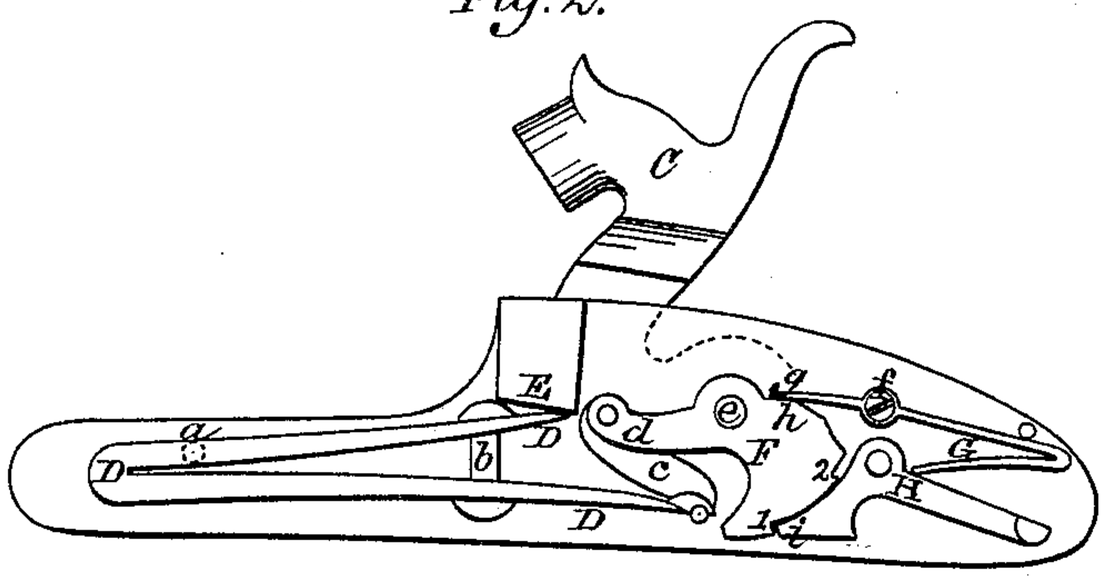


Fig. 2.



Witnesses.

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UNITED STATES PATENT OFFICE.

CHARLES E. SNEIDER, OF BALTIMORE, MARYLAND, ASSIGNOR TO HIMSELF AND DUNCAN C. CLARK, OF SAME PLACE.

IMPROVEMENT IN REBOUNDING LOCKS FOR FIRE-ARMS.

Specification forming part of Letters Patent No. **149,353**, dated April 7, 1874; application filed March 9, 1874.

To all whom it may concern:

Be it known that I, CHARLES E. SNEIDER, of Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Rebounding Locks for Fire-Arms; and that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings making a part of this specification, in which—

Figure 1 represents a perspective view of the lock; and Fig. 2 represents a side view thereof, with a portion removed to better show the parts behind it.

My invention relates to an improvement upon that class of rebounding locks in which the hammer, after it has struck the firing-pin or cap to fire the charge, is returned to the half-cock or safety notch by the reaction of the sear-spring, and not by that of the mainspring; and my invention consists, first, in a coupling or link, in combination with the mainspring, to prevent the latter from expanding or reacting beyond the limit of said coupling; and it further consists in combining, with the tumbler of the lock and the sear-spring, a projecting arm having a support in the lock-frame, and bearing upon the tumbler, for the purpose of returning the hammer, after it has struck the firing-pin, cap, or primer, to the half-cock or safety notch.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

The face-plate of the lock is shown at A, and at B is shown the plate or frame on the inside of the lock, for supporting the several moving parts of the lock, in the usual well-known way. C is the hammer, made for striking a firing-pin, cap, or other well-known means of firing a charge. The mainspring D is connected to the lock-plate A by a stud or pin, at *a*, fitting into a round hole in the said plate, so that the mainspring may move slightly about said pin as a center. The arms of the mainspring are coupled together, as at *b*, so that said spring cannot expand beyond the limit of said coupling or stay, and consequently always under a condition of slight compression. The upper arm of the mainspring is restrained from rising beyond a given point by its end or the head of the coupling coming against a stop, E; but the spring and coupling, in their restrained condition, can move bodily below that point or stop by or on the stud or pin *a*. The lower or long arm of the mainspring is connected, by the link *c*, to the arm *d* of the tumbler F, said tumbler being pivoted to the lock-frame at *e*. The sear-spring is shown at G. It differs from the ordinary sear-spring in having a pivot-pin at *f*, beyond which extends an arm, *g*, the point of which rests upon an enlargement, *h*, on the tumbler F. The short arm of the sear-spring bears against the sear H, so as to force the point *i* of said sear into the half-cock or safety and the full-cock notches 1 2, respectively, as the case may be, the sear being connected with the trigger in any of the usual well-known ways.

When the hammer is drawn back to the full-cock, the lower and long arm of the mainspring leaves the shoulder on the coupling *b*, the latter being held from rising by its upper end coming against the stop E; and, when the hammer is released by the sear or trigger, the lower arm of the mainspring expands until it comes against the shoulder on the coupling *b*, which is just before the hammer strikes the firing-pin or other explosive device, and after that the mainspring and coupling swings on the pivot *a*, the momentum of the hammer completing the last of its movement; and as the hammer falls, and the tumbler F turns on its pivot, the swell or projection *h* comes against the spring-arm *g*, compressing that spring, and the reaction of said spring-arm rebounds the hammer far enough for the sear to take the notch 1 of the tumbler F, and hold the hammer at half-cock. Thus the hammer, at the last and weakest part of its blow, is not required to compress the mainspring, which frequently restrains it from exploding the primer.

What I claim is—

1. In combination with the mainspring of a rebounding lock, the coupling or stay *b*, as and for the purpose described and represented.

2. In combination with the mainspring of a rebounding lock, coupled as herein described, the projecting spring-arm *g* on the sear-spring, and the swell on the tumbler F, as and for the purpose described and represented.

Witnesses: CHARLES E. SNEIDER.

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