

F. CHILLINGWORTH.  
SAFETY-LOCKS FOR FIRE-ARMS.

No. 170,988.

Patented Dec. 14, 1875.

Fig. 1.

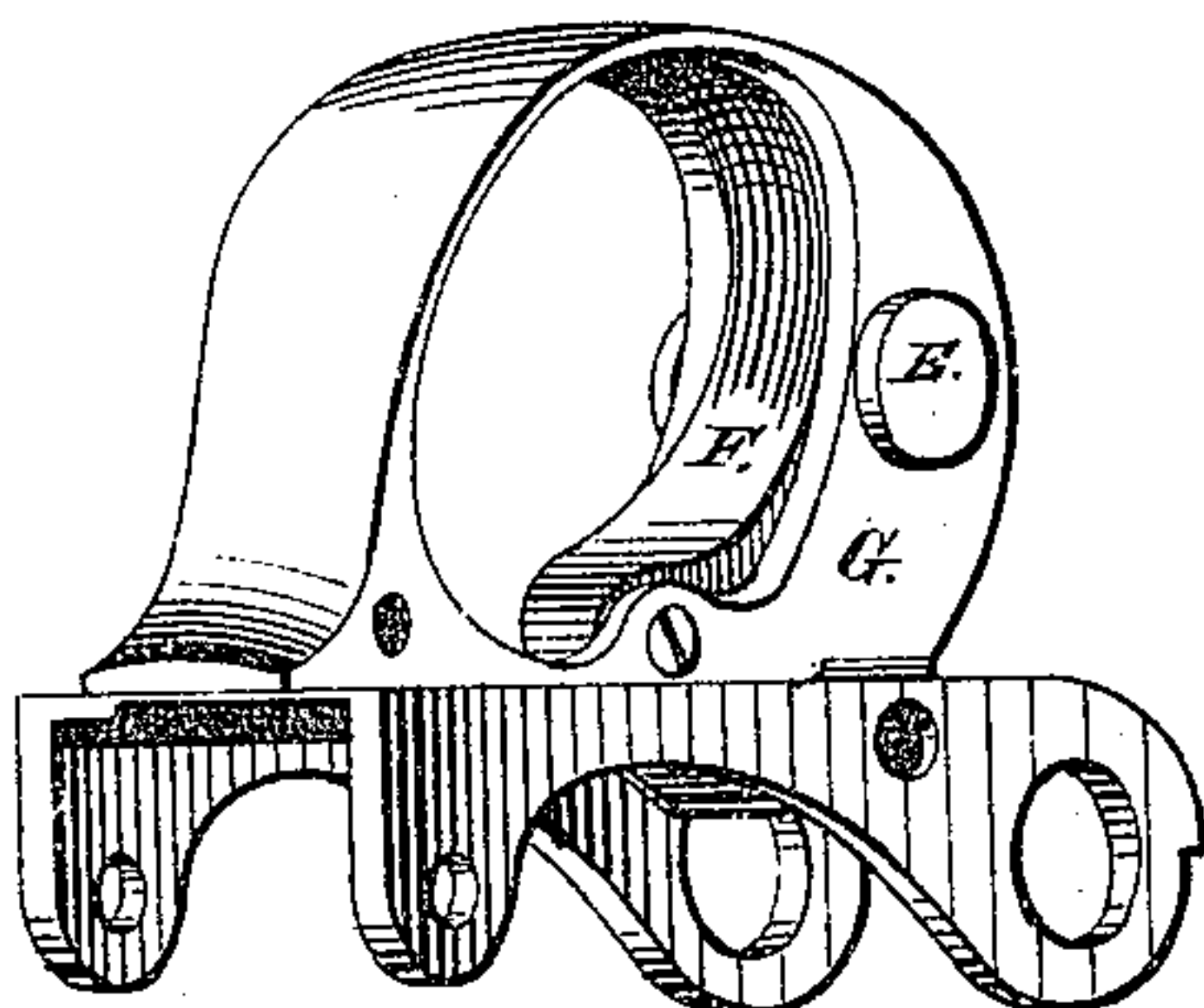


Fig. 2.

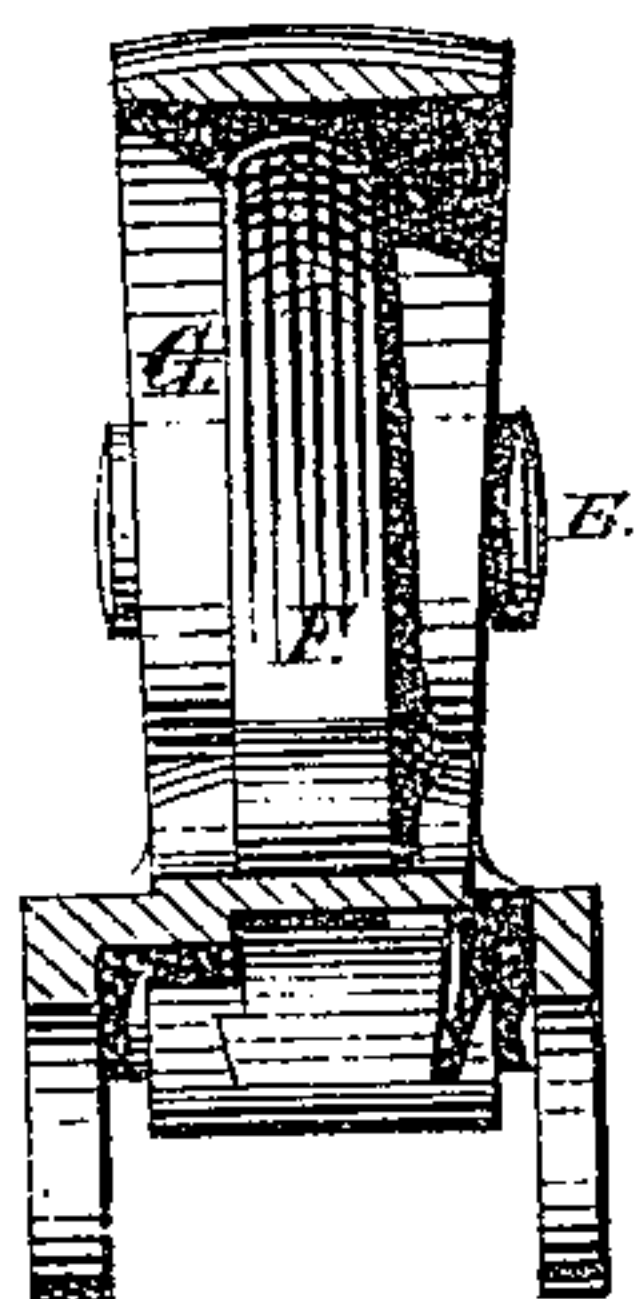


Fig. 3.

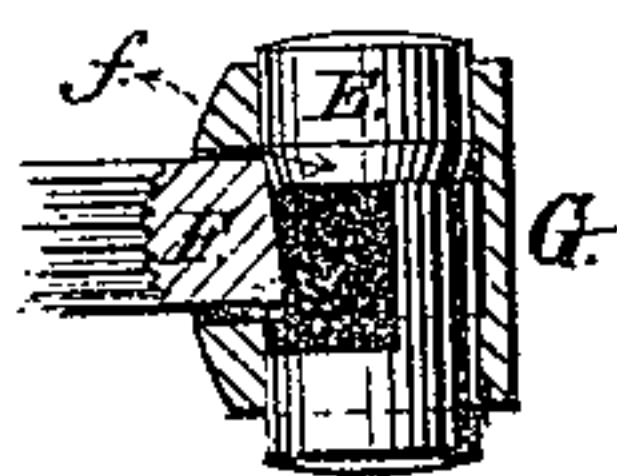
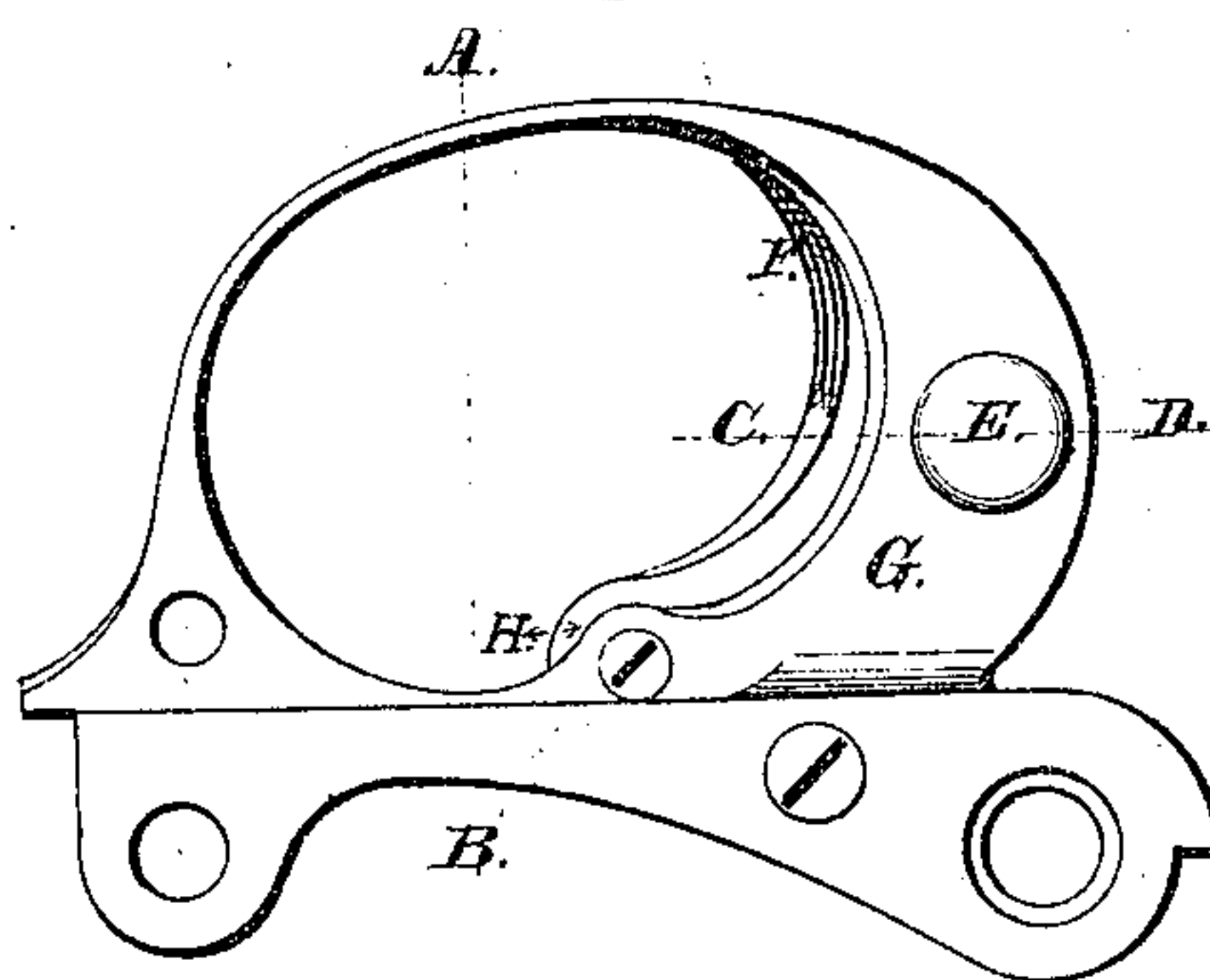


Fig. 4.

WITNESSES.

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# UNITED STATES PATENT OFFICE

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## IMPROVEMENT IN SAFETY-LOCKS FOR FIRE-ARMS.

Specification forming part of Letters Patent No. 170,988, dated December 14, 1875; application filed November 24, 1875.

*To all whom it may concern:*

Be it known that I, FELIX CHILLINGWORTH, of the city of Providence, State of Rhode Island, have invented a new and useful Improvement in Safety-Locks for Fire-Arms; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, and to the letters of reference marked thereon, in which—

Figure 1 is a perspective view of my invention. Fig. 2 is a section of a trigger-guard through line *a* to B, as shown in Fig. 3, which is a side view of the same, and Fig. 4 is a section through line C to D, showing the position of the cam-bolt when the trigger is locked.

My invention provides an improved method of locking a gun after it has been loaded and cocked. It consists of a bolt, which is so constructed and arranged within a trigger-guard that by pressing it back and forth the trigger may be readily locked or unlocked, thus preventing any accident arising from a premature discharging of the arm.

By the use of my invention the sportsman may, with safety to himself and others, carry his gun at full cock. On the appearance of his game he can in an instant with his finger noiselessly press back the safety-bolt and be ready to discharge the piece without alarming the object of his search by the usual click produced in cocking the arm.

Mounted troops, by using this invention, may, with perfect safety, carry their carbines cocked ready for instant action until the moment arrives to fire, when they can, without loosing rein, with the same finger, unlock the trigger and discharge their pieces.

Foot soldiers, when approaching or awaiting the approach of an enemy, by using my safety-lock, may, without endangering the lives of their comrades, or alarming their antagonists by accidental gun discharges, keep their muskets or rifles at full cock ready for instant action, and then without giving their opponents the usual note of warning, "the click of the lever or hammer," press back the safety-bolt, and discharge their pieces.

My invention consists, second, of constructing a trigger-guard with the space between the trigger and guard closed in, so as to pre-

vent the entrance of dirt or grit through the opening in rear of the trigger into the receiver of the gun, and there interfere with the working of the mechanism of the arm.

In the drawings, G represents the sides of the trigger-guard; E, the cam or safety bolt; F, the trigger; *f*, the bevels on bolt and trigger. The sides of the trigger-guard G are forged in one solid piece of metal with the rest of the guard. The recess, in which the trigger moves, is milled, broached, or shaved in the way in which such work is usually done. The sides are drilled to provide the necessary bearings for the bolt E. The edges of the sides of the guard G, Fig. 2, should be rounded to prevent the edges cutting the finger. The recess for the trigger should be so constructed that no grit or dirt can pass between the trigger, sides, and bottom of the guard F, Fig. 3. The back or rear side of the trigger, Fig. 4, has an angle or bevel to match a similar bevel upon the safety-bolt E. The trigger may be made square across; but I prefer to make it with the bevel, so as to take up any lost motion, or allow for a variation in thickness of the stock in the body of the guard under the nose of the trigger, Fig. 3. The safety-bolt E is made to fit the bearings in the sides of the guard. It is grooved or channeled to receive the trigger when the arm is discharged, as shown in Fig. 1.

In Fig. 4 it will be seen that the trigger is locked or cammed by the circumferential bevel being pressed against and binding the trigger F, so that it cannot be moved.

The groove in the bolt should be made so as to leave about an eighth of an inch longer on the bevel end than on the other, for the purpose of affording a projection to press against when camming or locking the trigger.

In assembling the parts of the guard, I first place the safety-bolt in its position, then trigger, screw, and the other parts in their order. The trigger, acting as a key, prevents the bolt from being removed by accident or otherwise from its position.

Heretofore devices designed to lock a gun after cocking have been so complicated as to render them impracticable in general manufacture and use. The best type of these devices known to the subscriber is that used on



the Martini-Henry rifle adopted by the English, but which has been abandoned on account of its proving impracticable. This device consists of six intricate parts, (see list of parts below cut on page 337, part 3, report of the honorable Secretary of War for 1873 and 1874,) while my invention consists of but one strong part, which cannot in any ordinary manner become broken or disabled, as the safety-bolt and trigger, being hardened, will long outlast the lighter pieces in the mechanism of the arm. It is also obvious that my simple device will greatly reduce the cost of manufacture.

It is obvious that the safety-bolt E may be made so as to be turned and cammed against

the trigger, instead of being pressed from one side to the other of the guard, and substantially the same thing or article before described will be produced.

Having thus described my invention, what I claim as new is—

1. In connection with a gun-trigger, a safety-bolt, E, substantially as and for the purposes described.

2. In a trigger-guard, the sides G, substantially as and for the purposes described.

FELIX CHILLINGWORTH.

Witnesses:

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