

N. PIEPER.

LOCK AND EXTRACTOR MECHANISM FOR FIREARMS.

(Application filed July 1, 1901.)

(No Model.)

Fig. 1.

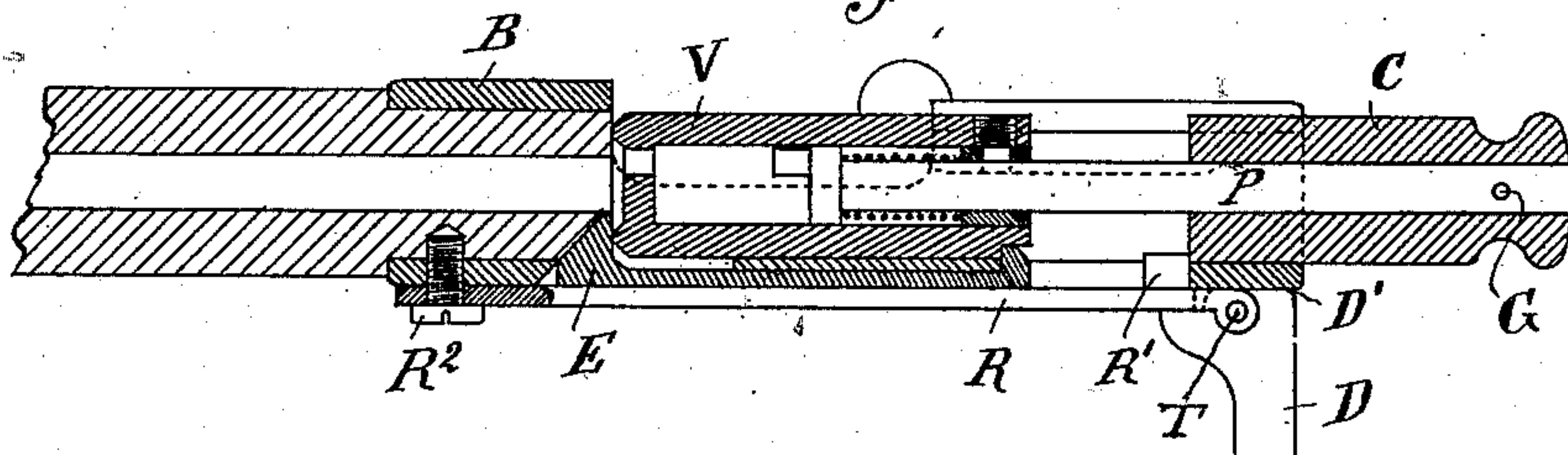


Fig. 2.

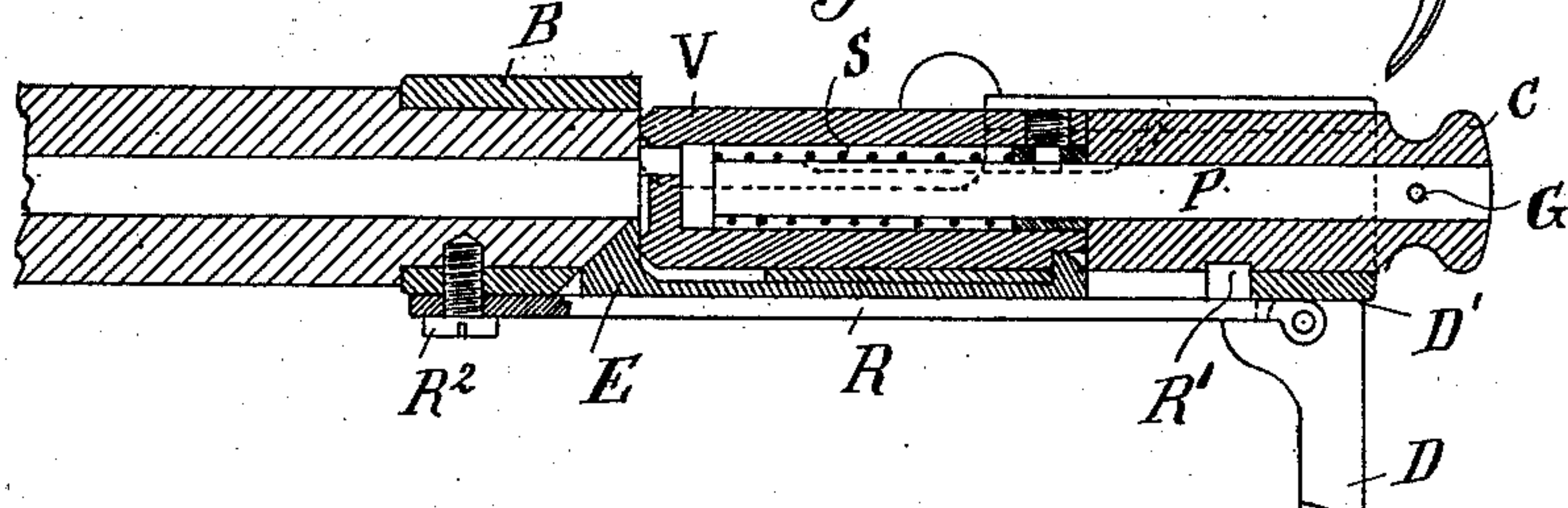


Fig. 3.

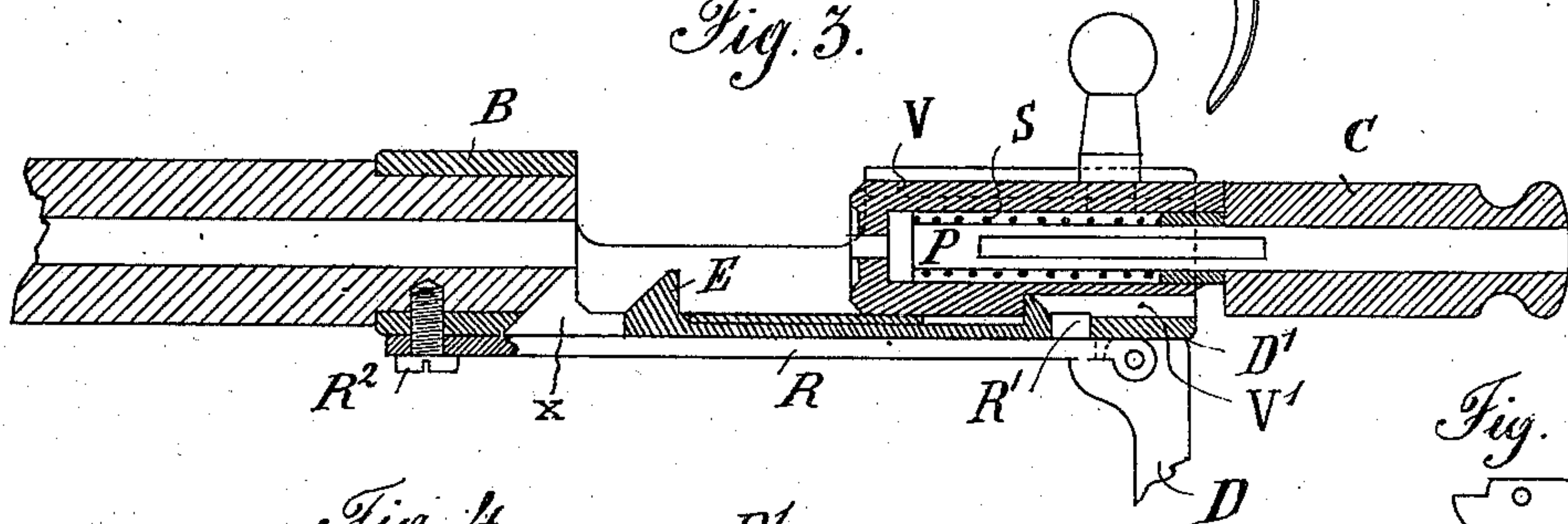


Fig. 4.

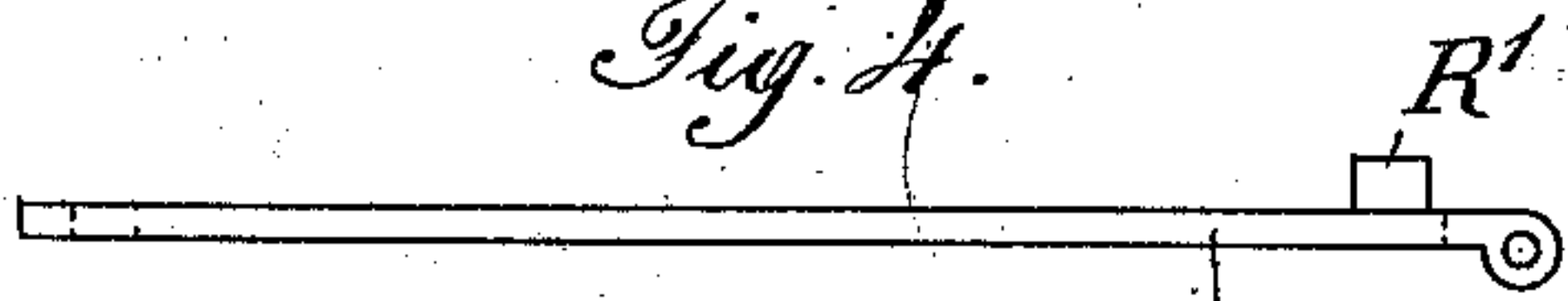


Fig. 5.

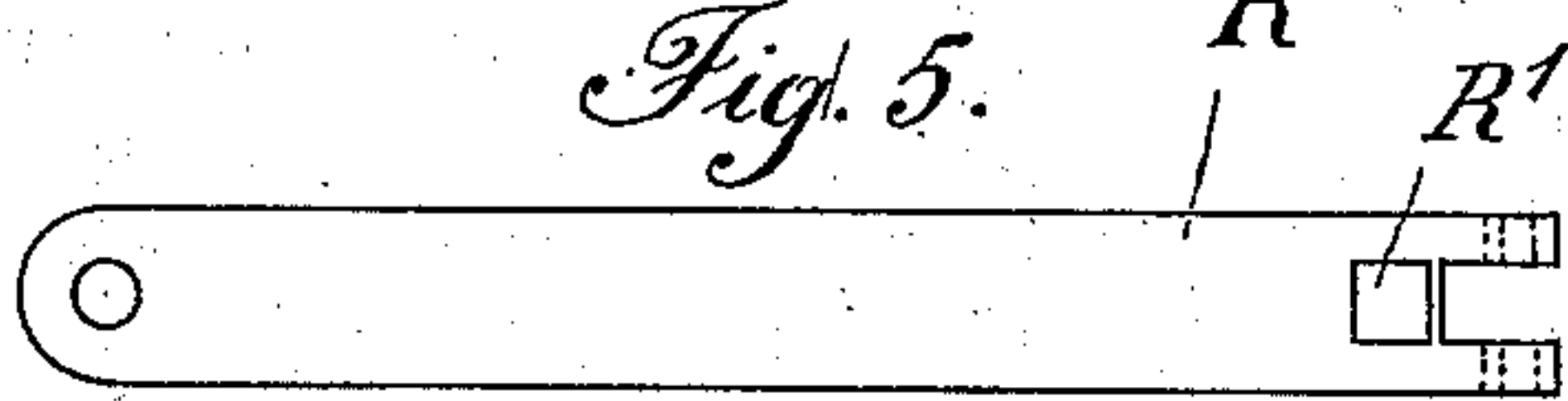


Fig. 6.

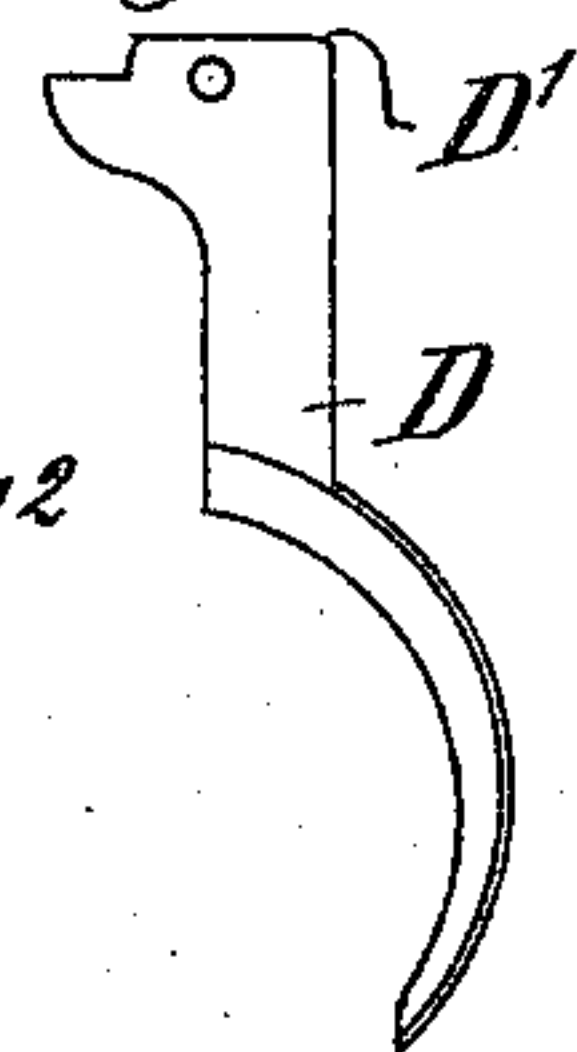


Fig. 7.

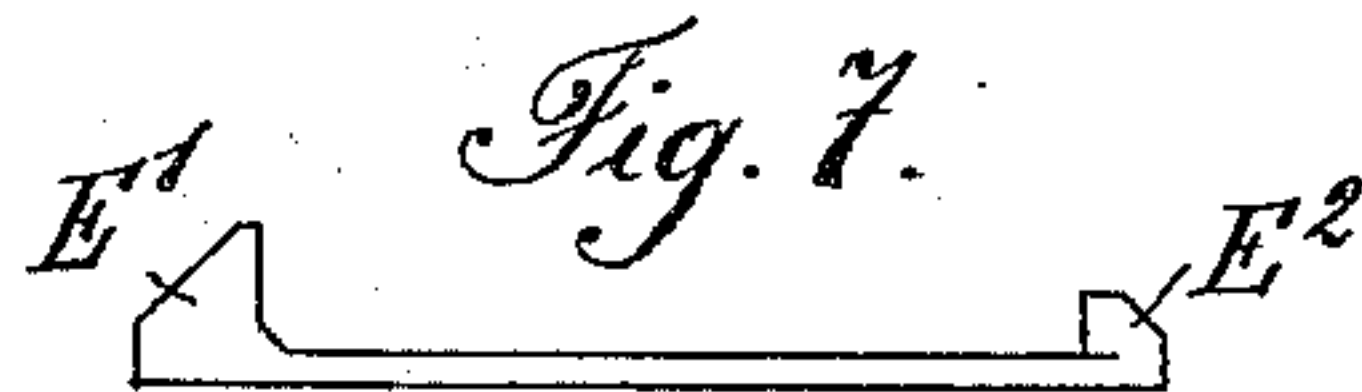


Fig. 8.



Witnesses
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UNITED STATES PATENT OFFICE.

NICOLAS PIEPER, OF LIEGE, BELGIUM.

LOCK AND EXTRACTOR MECHANISM FOR FIREARMS.

SPECIFICATION forming part of Letters Patent No. 706,199, dated August 5, 1902.

Application filed July 1, 1901. Serial No. 66,810. (No model.)

To all whom it may concern:

Be it known that I, NICOLAS PIEPER, a subject of the King of Belgium, residing at 18 Rue des Bayards, Liege, Belgium, have invented certain new and useful Improvements in or Relating to Firearms; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it ap-
10 pertains to make and use the same.

This invention has relation to the lock and extractor mechanism of firearms, and is particularly applicable to bolt-action guns, to which its application is hereinafter described.

15 The said invention consists, first, in a special form of trigger-spring, and, secondly, in a new system of free or sliding extractor actuated by the bolt.

In the accompanying drawings, Figures 1, 2, and 3 represent longitudinal vertical sections of the action of a bolt-gun constructed in accordance with my improvements, Fig. 1 showing the same with the bolt closed and the striker cocked ready for firing, Fig. 2 representing the parts in the positions they assume after the gun has been fired, and Fig. 3 showing the same when the breech is opened by drawing back the bolt. Figs. 4, 5, 6, 7, and 8 represent various detail parts of the
30 lock separately.

The same letters of reference indicate corresponding parts in the several figures of the drawings.

The spring R, which acts as a trigger-spring, is in the form of a long flat tongue or blade carrying a heel or sear at R'. The rearward extremity of the spring-blade is forked and is crossed by a pin T, by means of which it is jointly connected to the trigger D, while its forward end is fixed to the body B of the gun by means of a screw R², the body portion of the spring occupying a position parallel to and normally lying against the body of the gun. By virtue of the lifting
45 action of this spring the sear R' is made to engage with the shoulder of the cocking-piece C on the said cocking-piece, with the striking-pin P being drawn rearward for cocking the gun, so that on the bolt V being pushed forward to close the breech the sear remains in engagement with the cocking-piece and retains the latter with the striker (to which

it is connected by a pin G) in the cocked position, with the firing-spring S compressed, as represented in Fig. 1.

The trigger D has its fulcrum at D' against the body of the gun, so that when the said trigger is drawn rearward it, by reason of the joint connection at T, deflects the spring R downward, and thereby disengages the sear from the cocking-piece, which, being thus free, is projected forward with the striker P by the expansion of the firing-spring S, when the parts of the gun assume the positions represented in Fig. 2.

The extractor E slides freely in a slot α , extending through the lower wall of the gun, and is retained in position in the slot by the spring R, upon the top of which it has a bearing, teeth E' E² being provided at the opposite extremities of the extractor. The tooth E' normally lies in a recess at the breech end of the barrel B and engages behind the rim of a cartridge, while the other tooth E² (on the bolt being partially rotated for unlocking it) coincides with a groove V' in the said bolt, and after the bolt has been drawn back a certain distance the tooth E² is engaged by the shoulder at the forward end of the groove, as represented in Fig. 3, whereupon the extractor E is drawn along with the bolt for the remainder of its traverse and the extraction of the cartridge-shell is effected. The extractor works freely either backward or forward within the slot α and is supported therein by the spring R, and on a cartridge being placed into the chamber of the barrel its rim lies in rear of the extractor-tooth E'.

The trigger-spring R is represented separately in edge view and plan in Figs. 4 and 5. The trigger D is shown in elevation in Fig. 6, and the sliding extractor is represented separately in edge view and plan in Figs. 7 and 8.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. In a bolt-gun, the combination with the gun-body having a slot in its lower wall, the bolt, and the means for operating the bolt, of the extractor movable in said slot and adapted to be actuated by said bolt, the trigger-spring consisting of a flat blade arranged

parallel to and lying against the body of the gun and forming a bearing in which the extractor slides, and the trigger pivoted to the rear end of the spring, substantially as described. 5

2. In a bolt-gun, the combination with the gun-body having a slot in its lower wall, the bolt, the striker, and the cocking means, of the trigger-spring consisting of a flat blade 10 secured at its forward end to the gun-body and occupying a position parallel thereto and

having a sear at its opposite end, the trigger pivoted to said spring, and the extractor movable in said slot and supported therein by the trigger-spring, substantially as described. 15

In testimony whereof I affix my signature in presence of two witnesses.

NICOLAS PIEPER.

Witnesses:

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