P. MAUSER.

SAFETY DEVICE FOR FIREARMS, &c.

APPLICATION FILED MAY 21, 1909.

930,206.

Patented Aug. 3, 1909.

2 SHEETS—SHEET 1.

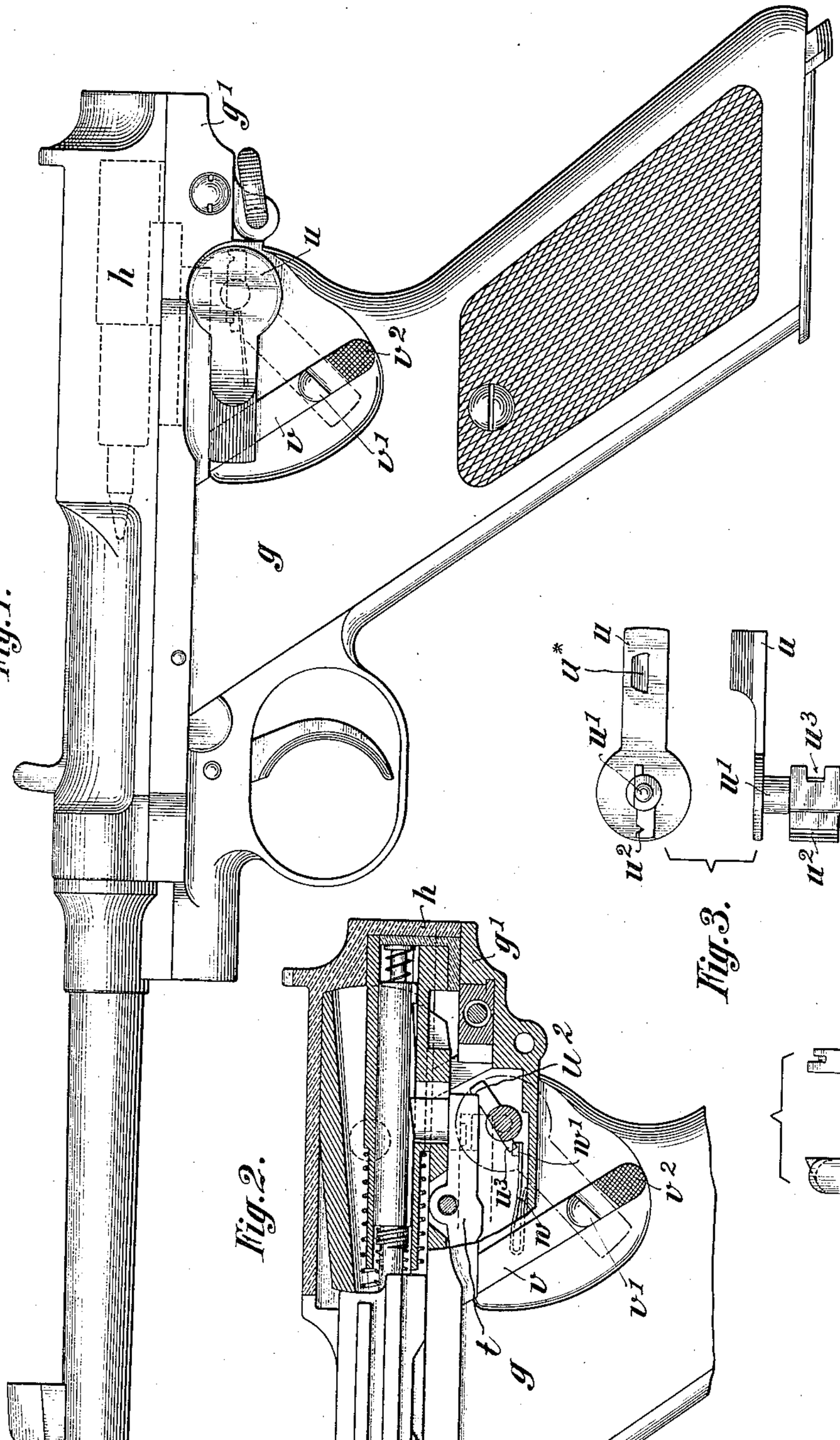


Fig. 1.

Fig. 2.

Fig. 3.

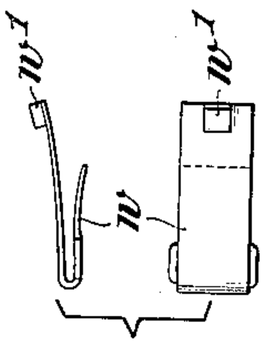


Fig. 5.

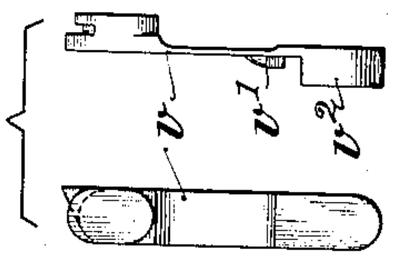


Fig. 4.

Witnesses:

Fred White

René Bruine

Inventor:

Paul Mauser,

By Attorneys,

Arthur L. Frasenheim

P. MAUSER.

SAFETY DEVICE FOR FIREARMS, &c.

APPLICATION FILED MAY 21, 1909.

930,206.

Patented Aug. 3, 1909.

2 SHEETS—SHEET 2.

Fig. 6.

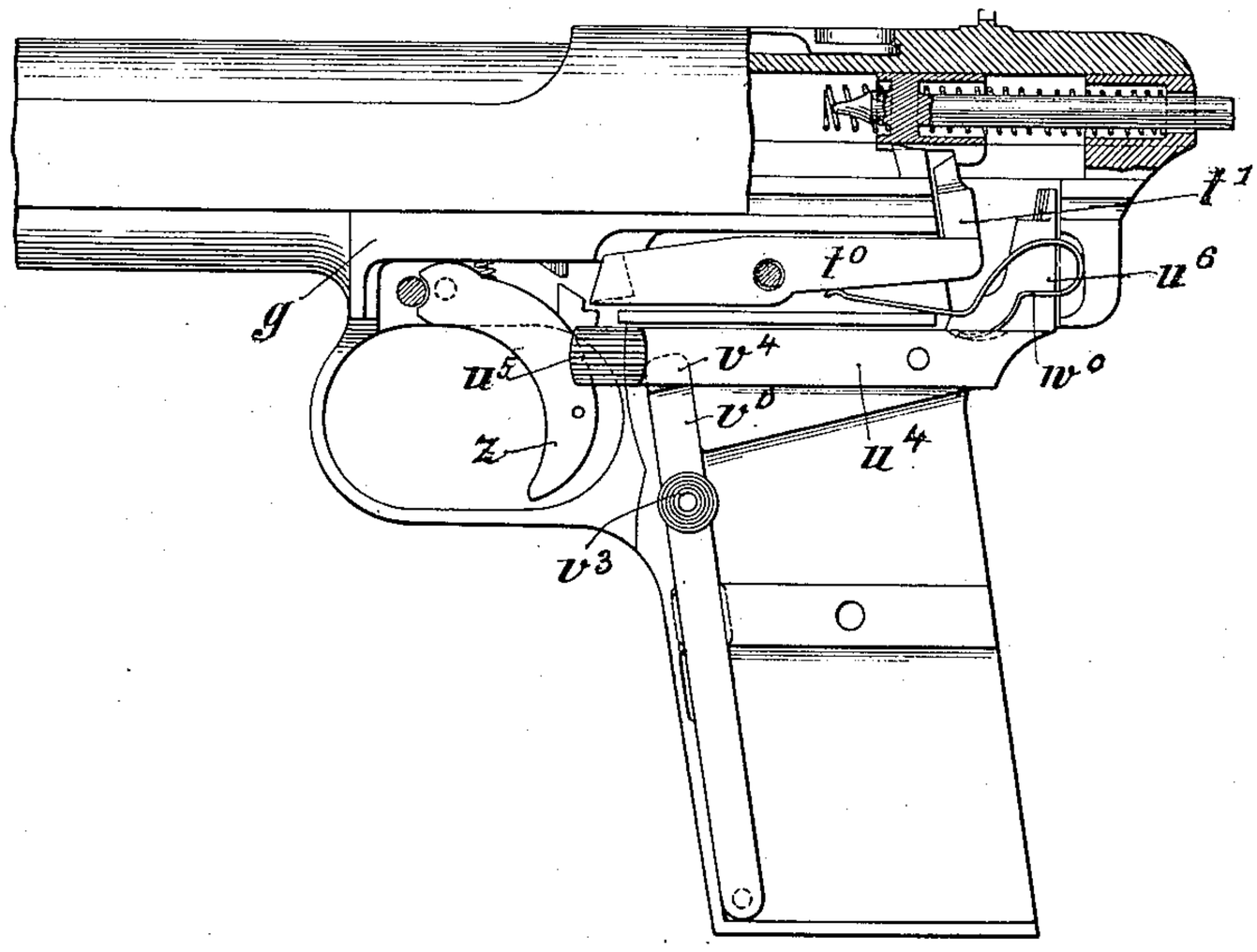


Fig. 8.

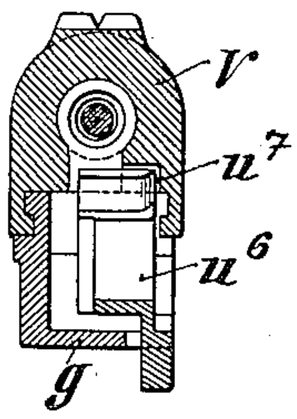
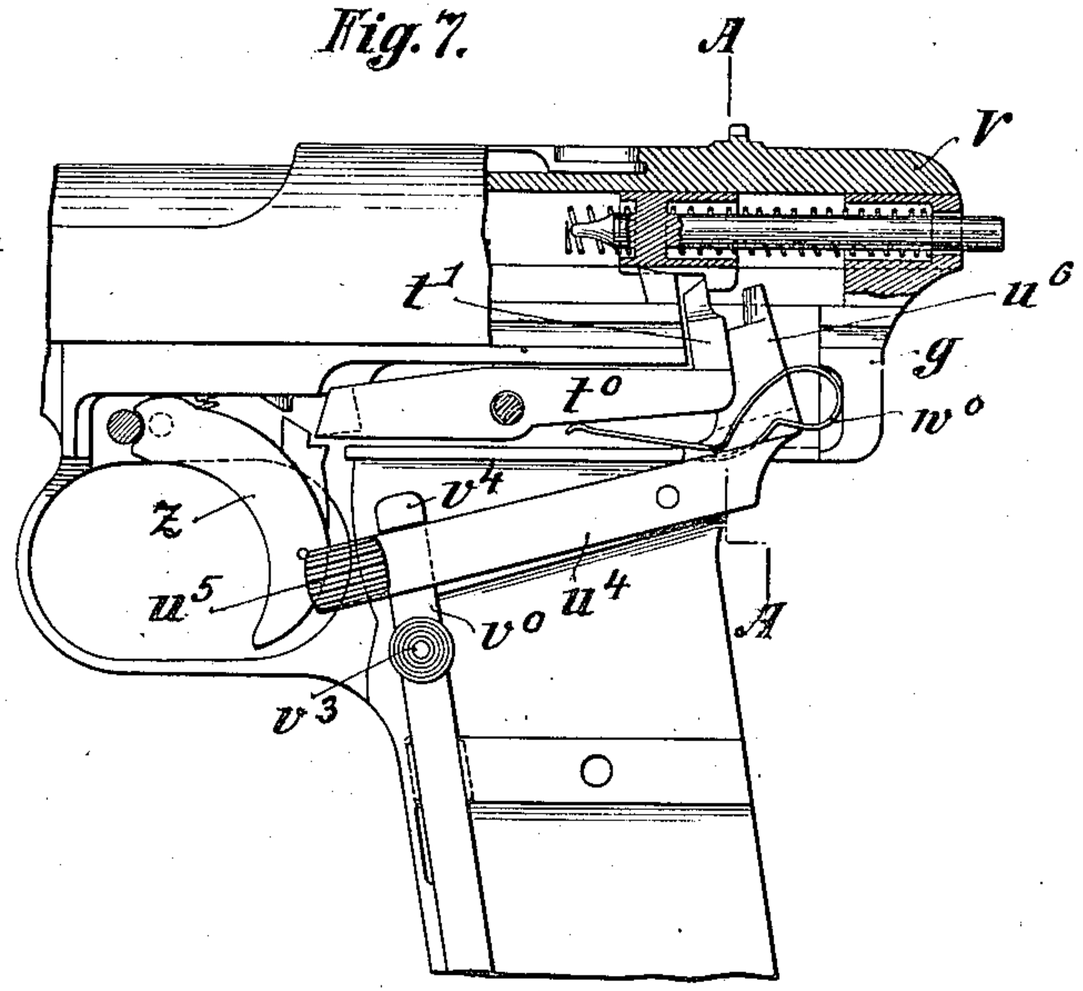


Fig. 7.



Witnesses:

Fred White

René Pluine

Inventor:

Paul Mauser,

By Attorneys,

Arthur C. Fraser & Sons

UNITED STATES PATENT OFFICE.

PAUL MAUSER, OF OBERNDORF-ON-THE-NECKAR, GERMANY.

SAFETY DEVICE FOR FIREARMS, &c.

No. 930,206. Specification of Letters Patent. Patented Aug. 3, 1909.

Application filed May 21, 1909. Serial No. 497,505.

To all whom it may concern:

Be it known that I, PAUL MAUSER, privy councillor of commerce, a subject of the King of Würtemberg, residing at Oberndorf-on-the-Neckar, in the Kingdom of Würtemberg, Germany, have invented certain new and useful Improvements Relating to Safety Devices for Firearms, Especially Automatic Firearms, of which the following is a full, clear, and exact description.

The invention relates to a safety device for fire-arms, especially automatic fire-arms, in which the sear is held in the safety position by a lever situated on the exterior of the casing and capable of being held in the safety position.

According to the invention the arrangement is such that the safety lever, acting, by means of a wing or arm, as a detent on the sear, is held in its safety position against the pressure of a spring, which latter pushes the safety lever into its position of rest when the locking device is released, so that a single handle effects the unlocking and releases the safety mechanism.

In the accompanying drawings two constructions of the invention are shown.

Figures 1 to 5 show the invention applied to a weapon with a movable barrel, and Figs. 6, 7, 8, to a weapon with fixed barrel and a so-called breech slide. Fig. 1 is a side view of the weapon closed and in the non-safety position. Fig. 2 shows the rear part of the weapon partly in section and set to safety. Fig. 3 shows a plan and side view of the safety lever with its projection or arm for securing the sear. Fig. 4 shows a rear and side view of the resilient securing arm for the safety lever. Fig. 5 shows a side view and plan of the spring. Fig. 6 shows the safety mechanism applied to a weapon with a fixed barrel and in the non-safety position. Fig. 7 is a similar view to Fig. 6 but showing the weapon set to safety, and Fig. 8 is a section on the line A—A of Fig. 7.

The safety device of the weapon, according to the construction shown in Figs. 1 to 5, consists essentially of a rotatable safety lever u, which is arranged on the left hand side of the stock g, underneath the rear end of the guide g^1 for the breech frame h, and is held in the safety position by a resilient securing arm or detent v located in the same position underneath the lever. The safety lever has an arm u^1 projecting toward the interior of the casing, which arm is preferably made integral with the lever plate and is provided at its rear end with a notch u^2. The position of this arm u^1 on the safety lever u is such that, when said lever is slanting downward and is consequently in the safety position, the arm u^1, with its notch u^2, is underneath the rear end of the sear t, and thereby holds the latter. The safety lever u is held in the safety position by the nose v^1 of the resilient detent v engaging in a corresponding cavity u^* at the back of the safety lever u. To effect the release it is only necessary to press on the press piece v^2 provided for this purpose on the resilient arm v, whereby its nose v^1 will be pushed out of the corresponding cavity u^*. The plate spring w located inside the casing acts on the front end of the arresting arm u^1 and, by engaging a notch u^3 in the latter with its narrow nose w^1, prevents the safety lever u from being moved sidewise and thus holds it in position. This spring also, when the safety lever u is released, causes the latter to spring back with its arm into its position of rest; that is to say, by simply pressing down the press piece v^2 of the arm or detent v. Thus the safety mechanism is quickly and easily released, but the resilient arm or detent v makes any accidental release impossible.

In the construction shown in Figs. 6, 7, 8, as applied to a pistol having a fixed barrel and a breech block guided on the stock, a bell-crank lever u^4, u^6 serves as a safety lever, the arm u^4 of which extends longitudinally to the trigger guard and carries at its extreme end the press piece u^5 which is adjacent to the trigger tongue, so that it can be comfortably operated by the thumb when the weapon is being used. The other arm u^6 of this safety lever is bent up at right angles or thereabout, so that it lies behind the similarly bent up arm t^1 of the sear t^0 when the safety lever is in the engagement position (Fig. 7). A spring arm v^0 is provided to hold the safety lever u^4, u^6, in this position of engagement, said arm v^0 being in the shape of a bar or long flat spring located inside the butt, as shown in Fig. 6. The spring arm v^0 is provided at its upper end with a nose v^4 against which the safety lever can rest. The spring arm v^0 is released by operating the press button v^3 on the same, which, with a view to facility of operation, is situated in a position adjacent to the press piece u^5 on the safety lever u^4, u^6 at the front part of the butt, *i. e.*, in the vicinity of the trigger. An important feature of this construction of

safety mechanism is that the arm u^6 of the safety lever u^4, u^6, acting as a detent on the sear t^0, is also capable of arresting the breech block. With this end in view the breech block V is provided on its inside edge with a recess u^7 in which the arm u^6, with a slanting top, engages when the lever is in the safety position, (Fig. 8). The same arrangement could, of course, be applied to a weapon with a movable barrel, in which case the corresponding recess would have to be provided on the inner edge of the breech frame. As regards the construction shown it should be further mentioned that the spring w^0, which holds the lever u^4, u^6, in the safety position and which, upon the arm v^0 being released, causes the safety lever to assume its position of rest, is in the form of a bent plate spring which also actuates the sear. While one end of this spring acts on the safety lever u^4, u^6, the other front end presses up against the sear t^0 in order to hold the arm t^1 in engagement with the nose on the firing pin, see Fig. 7.

What I claim as my invention, and desire to secure by patent is:

1. In a fire-arm, the combination of a sear, a safety lever adapted to act as a detent for the sear, a spring tending to move said safety lever to the position of firing, and an arresting device for holding said safety lever against the tension of its spring in the safety position whereby upon releasing said arresting device the safety lever springs back to its firing position.

2. In a fire-arm, the combination of a sear, a movable breech block, a safety lever adapted to act as a detent for the sear, a spring tending to move said safety lever to the position of firing, and an arresting device for holding said safety lever against the tension of its spring in the safety position whereby upon releasing said arresting device the safety lever springs back to its firing position, and said safety lever being adapted also to engage said breech block to lock the same.

3. In a fire-arm, the combination of a sear, a safety lever adapted to act as a detent for the sear, a spring tending to move said safety lever to the position of firing, and an arresting device comprising a spring arm engaging said safety lever and holding it in its safety position against the tension of its spring whereby upon releasing said arresting device the safety lever springs back to its firing position.

4. In a fire-arm, the combination of a sear, a safety lever adapted to act as a detent for the sear, a spring tending to move said safety lever to the position of firing, and an arresting device for holding said safety lever against the tension of its spring in the safety position whereby upon releasing said arresting device the safety lever springs back to its firing position, said arresting device and said safety lever being mounted near the trigger of the fire-arm for convenience of manipulation.

In witness whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

PAUL MAUSER.

Witnesses:
RAMON THELANDER,
E. J. FENN.